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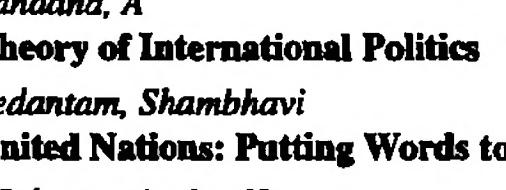
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# UNIVERSITY NEWS

**VOL. XXXIV** **JULY 1**  
**No. 27** **1996**  
**Price** **Rs. 7.00**

**A Weekly Journal of Higher  
Education published by the  
Association of Indian Universities**

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**Editor :**  
**SUTINDER SINGH**

# **Improving University Teaching**

## **The Role of the Teacher**

**T.J. Purani\***  
**S.T. Kapadia\*\***

Learning is the process of changing through experience. Through the cognitive and affective process of learning, people acquire relatively permanent changes in knowledge, skill, beliefs, attitudes and feelings, which give new meanings to experience and lead to an awareness of the surroundings, and the strength to cope with the challenges as and when they arise. In modern complex societies, with their continually changing base, an enormous amount of learning occurs not only in institutions but outside which includes and goes beyond the acquisition of facts, values, knowledge, attitudes and beliefs to include learning strategies and control of one's thought processes and abilities to learn. It is in the light of changes taking place that one needs to focus attention to improving of university teaching. And the vital component is the teacher. Durkheim rightly contended that the object of education is to arouse and to develop in the child a certain number of physical, intellectual and moral states that are demanded of him by both political society as a whole and the special milieu for which he is specifically destined. This is where the teacher steps in.

For long we have been focusing on teaching as a crucial variable needing improvement. The results, however, have not been satisfactory. Scholarly studies and popular articles complain about the "poor teaching" in our institutions of higher education. An alternative approach which focuses on learning may be more appropriate for the future. Some of the assumptions underpinning such an approach are (a) "teaching" has meaning only if 'learning' takes place, (b) learning is a concept that is applicable to all segments involved in higher education, and (c) the process of learning provides a feedback mechanism for improving teaching. The question is, therefore, "how to improve learning and the capacity to learn in the University system?"

Posed this way, the question implies that one has to move away from the very common assumption that "learning" is only for students. It is essential to recognize that teachers, the management, the institution as a whole, and very importantly, the "stake-holders" — external elements — are also learning segments. The meanings attached to "learning" may be different for the different segments.

## Responsibility for Learning

Very often, the tendency is to externalize the responsibility, that is, make someone else — teacher trainers, government, etc. — responsible for one's own learning. However, taking up the responsibility oneself is more likely to help in professional development.

College teachers, for an interminably long period, employed chalk and talk method — it still continues to be used by many — and how it

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has been replaced by the method of dictating notes, especially in the faculties of Arts, Commerce and Education. The college teachers are singularly ignorant about the new education technologies available. On the one hand, there is monumental indifference on the part of teachers and on the other, those keen to know and acquaint themselves with the latest techniques, do not find the institutions and the management willing to provide them. As a natural concomitant to this state of affairs, other agencies — coaching centres — fill the vacuum attracting more and more students. This is reflected in the near-empty classroom and almost over flowing tuition classes and coaching centres. This can be termed as an indirect admission of failure of teachers and institutions of higher learning.

### **Learning from Peers**

In the current atmosphere of cynicism, a lot is said about why things do not work. A more positive approach is to learn from good practices which have produced results. Some of the teachers recruited in institutions of higher learning are, it is sad to say, the product of teaching shops and coaching centres, many of them may have relied heavily on the bazar notes and other substandard materials readily available in the market. As an inevitable consequence, the calibre of such teachers leaves much to be desired. It is, therefore, imperative that such teachers should sit with other senior and well-equipped teachers and learn from them. The collected wisdom of the experienced teachers can go a long way in raising the level of newly recruited teachers. This kind of sharing will have a salutary impact not only on the teachers but also on the learners.

Willingness to learn and infectious zeal and enthusiasm is very necessary on the part of teachers but those qualities cannot be inculcated through preaching. This will necessitate a system of refurbishing acquired knowledge and simultaneously adding new knowledge. For this, procedure for appointment will have to be altered and improved. After appointment, the academic staff colleges can step in but sadly enough, the training imparted through these colleges has not been able to equip the teachers professionally.

### **Mentoring**

It is well known that the mentor makes a big difference to the career of a young teacher. Possibly,

a list of good teachers can be made and new teachers can be under apprenticeship for a year or less.

When we talk of research here we have classroom action research or small projects in mind. If on the other hand, a college teacher is expected to be a full-fledged researcher then it would do more harm than good. The reason is quite obvious. If a teacher devotes most of his time and energy to research work, his classroom work will inevitably suffer. His students also will consequently suffer. There are teachers who have proved their mettle and have contributed to the all round development of their learners but sadly enough their achievements are hardly recognised. Their students bag prizes and medals but they get neither any promotion or any recognition for the simple reason that they have not undertaken the so called research work. This is evident from the fact that some teachers even with dubious nature of their research have been rewarded with plum positions. This results in dampening of the enthusiasm of good college teachers.

### **Motivation**

This is a crucial element which determines the quality of teaching but is one of the most difficult to maintain given the highly politicized and "de-academized" atmosphere in the universities of today. Thomas Sowell, an American academician, rightly said that, "they (college teacher) are academically underdeveloped, not only that, their attitude is also not academic." What he said about teachers in America is true of teachers in India. At the core of motivation lies excitement in doing something which is meaningful. If there is no excitement, and if the meaning in the activity is missing, there is no question of motivation. In the present situation monetary and even non-monetary rewards to teachers can be a source of motivation. And teachers will love to work towards such rewards.

### **Self-regulation**

This is a controversial area, especially when many teachers talk like union workers. The degree of attention given to monetary benefits, pay commissions and holiday norms is not visible when it comes to academic matters — whether it is updating one's own knowledge, adhering to prescribed norms, or even the ethics of running parallel teaching activities. Bringing about some self-regulation among teachers will definitely improve teaching. The institution or principal can only play a marginal role in such matters. The individual teacher has

to realise his or her responsibility in adhering to certain norms of behaviour and ethics. At the same time some kind of accountability is expected of a teacher to follow a code of conduct.

It is undeniable that the present day college teacher has to operate in a very large classroom and the teacher very rightly complains about his being not able to deliver the goods as a result of these large classes. He calls it, to use a cliche, 'exercise in futility'. But the problem requires to be looked into from the students' angle. With hardly any opportunity to interact with the teacher, a learner is a faceless anonymity. Hence he loses all interest and goes out in search of pastures new. A good teacher should and can create opportunities for interaction even in large classes which are a stark reality and cannot be done away with. If this does not happen — and it does not in most of the colleges — the teachers will be solely responsible for making the students throng the teaching centres.

"I will tell you what I think we expect of a teacher today and contrast it with what we used to expect of teachers, namely, that they should be instructors. I think the teacher today is required to be something of a blend between a gardener and an incendiary,"

says Prof. C.H. Dobinson, Director of the Institute of Education, University of Reading. In the good old days the teacher was mainly a source of information. The situation today has changed and continues to change. The radio, television, popular magazines and newspapers, all provide a plethora of information on a mind boggling variety of topics and subjects. It's a virtual deluge, but what is necessary is not always additional information with which students are bombarded by all sorts of sources, including propaganda and advertisement of the things but a strong desire to sift and analyse some of the things they observe around them and develop proper perspective on them. In other words, the mind is to be set alight and then the other task is the training of character. It is in this sense that Prof. Dobinson calls the teacher a blend between a gardener and an incendiary. The modern concept of teacher's role is not really to provide training but to modify the environment so as to provide the optimum condition for growth. This is possible only if the teacher knows the environment of the learner and the pulls and pressures — hereditary & environmental — shaping his being and then aim at his total transformation during the time he is going to be his subject.



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# A Commentary on the Medical Research in India

Baldev Singh\*  
Anand Kumar\*\*

The tradition of Ayurvedic medicine is very ancient in this country. The Unani system of medicine was introduced in India during the Mughal period. Since then both the systems are being practised. The two systems carefully observed the disease processes, and described and classified them on the basis of empirical logic and philosophies. Postmortem and experimental procedures were seldom adopted to prove hypotheses. Modern medicine evolved in the West. The scientific investigation and experimentation became the basis to put forth and evaluate a hypothesis. Animal experimentation was undertaken to produce ideal models to study the process of human evolution, development, growth, senescence, health and disease. The young and old of various species now serve as models of disease and therapy of the disorders of human health.

Western medicine was introduced in India by the British. The medical schools were established to produce physicians to meet the demands of the British and the local citizens who could not go to Britain for treatment. The aim of medical education was to train the manpower to treat disease. Investment and training in scientific research was not thought to be important in the colony. Immediately after Independence, the planners felt a strong need to develop indigenous research expertise to tackle health problems peculiar to our subcontinent. Hence, the Indian Council of Medical Research and subsequently other organisations came into existence. They made extensive plans to promote research in the bio-medical and allied sciences in India. General statements made in casual conversation and even in writings in the popular press suggest a deficiency in the quality of medical research in India. The research output in the form of publications in reputed scientific journals has increased in the recent decade. Still, an allegation is made that despite huge investments, few indigenous drugs or diagnostics have reached the market in India. Few medical researchers have

earned international recognition and none a Nobel prize. Allegations are also levelled that the hi-tech biomedical research in India is merely an adoption or reproduction of the techniques developed in the West with insignificant variations. The allegations are perhaps true only to a certain extent, but to that extent they are true. Our country has the third largest pool of scientific and technological manpower. More and more workers are taking biomedical research as their careers. This is the opportune time to contemplate and have a relook at the quality of biomedical research, the factors affecting the quality and quantity of the research and the means to improve it.

The factors which could influence the scientific output are discussed in the following order : 1. The external environment; 2. Human resources and the internal environment; 3. Inputs from industry; 4. Competitiveness between organisations; and 5. The pressure to publish.

## 1. The External Environment

The quality of all the activities including research are intricately linked with the general well-being and the overall environment in the country. There are five major factors which influence the general environment : Economic, Demographic, Socio-cultural, Political, and Technological.

Economic progress determines the quality of life and the living standards in a country. A prosperous background promotes excellence in all walks of life — be it sports or be it science. Economic progress cannot be achieved with a huge load of population. This load creates chaos and impedes the pace of development. The level of literacy and education creates awareness, develops culture and a work ethos. Primary and Secondary education should lay emphasis on the development of the spirit necessary for scientific enquiry. Only school education can create the culture of science and work in centres of advanced studies. The political environment too is important for all the developmental activities in a country. The political factor has a strong influence on the economic, demographic and socio-cultural environment of the country. The status provided to a profession in the general organisation of a country determines its progress. The areas of activi-

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ty with highest premium influence and set standards for other professions as well. Perhaps science is bureaucratised in India. Scientists wish to acquire an esteem equal to their peers in bureaucracy and tend to run scientific organisations on the pattern of a government office. This is an unhealthy effect due to the low priority given to education and science. The technological advancement in the other areas too influences the quality of scientific work. Good facilities for telecommunication, travel and other means for the exchange of scientific information between the scientists and groups limit the wastage of time and money in the development of newer skills and expertise in different laboratories. For example, a facility of computer search of literature could overcome the poor library facilities available to an active group.

## 2. Human Resources and Internal Environment

Human resources have an immeasurable potential for development. A healthy climate is necessary for quality research. Openness, enthusiasm, trust, independence and team spirit is essential for the development of a scientific culture. A sense of belonging and faith in the benevolence and fairness of the organisation is essential for the spirit of science to flourish. The freedom to interact and share information with the peers inhouse or outside would promote work output. The organisation should manage to keep up the motivation and the enthusiasm of the scientists to get the best out of them. The performance of the researcher provides a feedback about the adequacy of the institutional objectives and the policies. The work performance reflects the motivation and the motivation is determined by the management policy of the institution.

Now we will discuss motivation and the appraisal of the work performance of a researcher and the ways to improve both.

### I. Motivation

Motivation is the essential quality of a high grade researcher. Motivation seems to be the major problem of research in India. The hierarchy of human needs should be understood by the planners and managers of medical research in India to tackle the problem of poor motivation.

#### 5. Self-realisation or Self actualisation

#### 4. Esteem and Ego needs

#### 3. Social needs

#### 2. Safety needs

#### 1. Physiological needs

The satisfaction of the higher needs such as 4 and 5 is very important to persons in the profession of creative sciences. Any one in the profession of science who fails to achieve the higher needs loses interest in his work. Need number 4 is reflected in the desire for social and hierachial status, recognition and prestige at the place of work. This is achieved by timely promotions, participation in decision making and freedom of self-expression. Self-realisation or self-actualisation is the highest need of people engaged in intellectual vocations. The fulfilment of this need makes the worker independent of the environment and other factors. He becomes self-directed and creative. He works more to get a sense of fulfilment and pure joy than to get any reward. This aspiration is difficult to achieve and remains an ideal to be fulfilled. Fulfilment of the higher needs should be the objective of the institution in conjunction with the demand for high input. Both the objectives should go hand-in-hand to improve the morale of the researcher and increase his output.

### II. Demotivation

Textbooks of management describe the following symptoms which indicate demotivation and demoralisation: Increasing absenteeism, increasing turnover of manpower, apathy and alienation, decreased output and productivity, increasing wastage of resources, argumentative and defiant and confronting behaviour, frustration and unrest, non-cooperation, strikes and gheraos and abusive and violent demonstrations.

The various factors which demotivate a worker are as follows :

1. Under-assignment to a person or the failure to utilise his training.

2. Over-assignment to a good worker so that he feels exploited.

3. Buck-mastership of the group leader: the group leader may pass on a hard job which he is expected to do to a subordinate and then criticise the work done by the latter.

4. Coercive and threatening attitude of the boss: it is not uncommon for the senior researchers to put their names in the publications of their subordinates or take the credit for their work. The supervisor may covertly threaten to use his powers to meddle with annual confidential report etc etc. It needs to be emphasised that over-bearing influence or attitude of the person in authority is very devastating. This

is specially taken care of in any institution which is expected to employ scientists of high quality.

5. Manipulative behaviour of authorities is also detrimental to the morale of the scientific community. The policy of divide-and-rule, making false promises, encouraging groupism and appeals to the sense of patriotism during a crisis are very demoralising.

6. High expectations with meagre inputs is yet another factor that may demotivate a worker.

### *III. Induction of Motivation*

The following means are recommended to increase motivation:

1. A well defined humanistic personnel policy is a must. The organisation should have an image of fair play and objectivity in recruitment and promotions with little scope for extra-academic influences.

2. The wage and salary structure should be free from internal and external inequalities.

3. Periodic evaluation of the worker should be done to improve him. It should not be used for any punitive action. The output should always be matched with the input provided.

4. Good performance should always be rewarded.

5. Freedom to work and share information and expertise with peers increases the motivation.

6. There must be provision for job enrichment and job enlargement to increase both job-satisfaction and self-esteem. The utilisation of one's training by the organisation increases one's self-esteem.

7. The scope for career planning and development should be inbuilt. This would reduce the turnover of manpower for the lack of promotional avenues. However, in our country the problem of high turnover in the apex institutions is not possible due to lack of alternative organisations and employment opportunities, leading to further stagnation and frustration in the workers.

8. There should be an efficient machinery for grievance redressal. It should adopt methods familiar to the worker and should act in short time. The machinery should have a reputation of neutrality and impartiality.

9. The top managers must themselves be motivated to enthuse their subordinates. The group leaders should be evaluated often and oriented in their roles. The superiors in science have to be more sensitive as they deal with a group which is temperamentally unique.

The following roles of a supervisor or group leader are envisaged :

(a) **Role of conscience-keeper:** The head must remind the authorities of their moral and ethical obligations to the scientific community and commitment to the unique culture of science.

(b) **Role of counsellor and problem-solver :** The head must frequently meet the subordinate scientists and discuss their needs, problems in the profession and family as well. He must be friendly and accessible.

(c) **Role of mediator :** He should be able to settle disputes and disagreements between the scientists and between the scientists and authorities.

(d) **Role of Liaison Officer :** He should serve as a sympathetic link between the bench scientists and the authorities. He must provide an unbiased feedback to the authorities about the strengths and the weaknesses of the scientists. He must share information about the future development plans of the organisation to motivate the workers.

The head should help in the acquisition of funds and equipments by his juniors at both personal and official levels. His help would assist in the attainment of institutional objectives. The group leader should promote a healthy work climate in his unit. He should promote independence in working. Prof. C.V. Raman refused government support for his research when he read the provision of annual report. The annual report was an affront to his freedom. Such a fierce desire for independence is not uncommon in highly motivated scientists. This instance is cited only to make the point and not to plead the abolition of annual reports. The group leader should promote the feeling of equality amongst his colleagues. In the developed world of science the feeling of equality is actively promoted. Equality is to the extent that everyone calls his colleagues and superiors by their first names. This promotes the team spirit and friendliness within the group.

The group leader should help his colleagues in establishing communication with other scientists and peers. He should help his group in career advancement. Any leader who blames most of his colleagues for the shortcomings in the attainment of institutional objectives is not fit to lead a group. Any leader who arouses resentment in the majority should be counselled by his superiors. The group leaders should be frequently evaluated for the qual-

ties they are supposed to have. This evaluation should be done by the authorities and subordinates both. Group leaders too require frequent trainings, orientation and advice as to how to ensure the maximum output of the group under them. They too should be encouraged, motivated and rewarded for the good functioning of their respective groups.

#### *IV Appraisal of Work Performance and Retrenchment of Deadwood*

The work performance of the scientists and group leaders should be assessed periodically. This evaluation will provide a feedback on :

- \* the adequacy of the institutional objectives,
- \* the adequacy of the means to achieve the institutional objectives, and
- \* the areas of strength and weakness in the individual and the organisation and also the remedial measures required, if any.

As already reiterated, the evaluation should not be done to punish an individual but to improve him. The personnel could be provided information as to how to remove their deficiencies. The managers could be advised as to how to optimise the work output. The feedback will identify the persons and the areas which require additional inputs and wherein lies the additional or unutilised input. The evaluation system should be fair and objective and free of the personal biases of the group leader or the authorities. The employees must have faith in the fairness of evaluation. This faith is the backbone of the motivation.

Simultaneously, a mechanism must be built in to get rid of non-performers. In the western countries, the scientists are hired on a tenure basis. At the end of the tenure they are either fired, transferred to other areas of their interest or given a further extension. The good ones are promoted before or at the end of their tenure. The concept of tenure jobs can be modified and adopted to suit our system as well. Anyway, the jobs of the directors and deans of the apex institutions are on tenure basis. This scheme could be applied for the lower positions of the group leaders and the bench scientists as well. But extreme care should be taken lest a person is relieved due to the failure of the organisation to provide him equal facilities and time. Consideration must be given to the nature of the task and the time required for its fulfilment. Retrenchment should be performed by duly constituted committees with the participation of external referees with high credentials. The tenure jobs will reduce redundancy in the organisation. Tenure jobs will tremendously increase the moral responsibility of the organisation. The organisation will have to build up a reputation for and thus faith in its impartiality, benevolence and human values to adopt the tenure system at the middle and lower levels.

#### **3. Inputs from Industry**

Research cannot thrive solely on governmental support. In the Western countries, pharmaceutical industries have their own research and development units to further their technology. Researchers in the pharmaceutical companies have even shared Nobel prizes in addition to marketing their research.

The pharmaceutical companies in the West liberally finance the projects of their interest in research institutions. Close cooperation between the industry and the bio-medical research institutions should be encouraged and developed by means of various incentives by the planners of scientific research in the country.

#### **4. Competitiveness between Institutions**

Yet another factor that has brought down the quality of research in India is the total lack of healthy competition in medical research. There are only a few institutions which pursue related problems. Hence the research output of an apex institution cannot be compared, matched and assessed against the work of others. The research output "appears to be the best and excellent" due to the absence of peers in an area. Hence, the number of institutions working in a particular area should be increased to provide upliftment of academic atmosphere and generate desired competitiveness. The best that can be done under the present circumstances is to harness already existing resources. The medical colleges should be identified and their existing faculty should be provided motivation and additional training in the advanced centres in India and abroad. They should be provided finances and instruments to start various nuclei all over the country. The researchers should be made part and parcel of the university set up or at least made free of the service conditions of the state government. The requirements of academia are not the same as that of the bureaucracy. Then why similar service conditions and similar controls? The researcher needs a stable place to work. In the state medical colleges the faculty is frequently transferred. The researcher needs liberal leave rules to visit conferences, workshops and other similar laboratories in the country or outside, and oftener.

Experience tells us that the service conditions in the state governments strongly deter these activities. The state college faculty does not apply for research funding for the simple fear of frequent transfers. Any person can learn and master any science or technology at his own pace of learning if given an opportunity — this is a dictum in education. Hence, we cannot regard the manpower in the peripheral medical colleges as inferior or unusable. We can use the existing institutions and the manpower to the best of our advantage and generate many centres of excellence and competition. By improving the faculty of the peripheral medical colleges and providing them the necessary inputs we can obviate enormous expenditure in opening new institutions of excellence.

### 5. The Pressure to Publish — Quality vs Quantity

Quality is more important than quantity in research. What is required is an increased quantity of quality research. The noted Indian scientist Prof. A.S. Paintal has cautioned the third world scientists against the slogan "publish or perish". The institutions must realise that high quality of work is a permanent asset and builds the foundations of science. The pressure on quantity reduces the quality

of the research and encourages fraudulent work. The futility of the slogan "publish or perish" is being realised even in the "first world of science". Some appointment committees in the USA insist on limiting the allowable size of a candidate's publications<sup>6</sup>. The most noted Indian scientists like Sir C.V. Raman, Profs. M.N. Saha and S.N. Bose could never cross the mark of 30 in the list of their publications. In our country it is common to find researchers with more than 200 publications but little international acclaim. It must be remembered that the pressure on quantity is detrimental for quality.

### Bibliography

1. *Planning Personnel Function, Managing Men*. Block 1 (Ms-2) 1987. Published by School of Management, Indira Gandhi National Open University, New Delhi.
2. *Employee Development and Growth*. Block 2. *Ibid.*
3. *Motivation, Job Design and Appraisal*. Block 3. *Ibid.*
4. *INSA News*, May-June 1988, p. 3.
5. Is the literature about to be readable? *Nature*, 1988 (335), p. 665.
6. Harvard tackles the rush to publish. *Science*, 1988, 241, p. 525



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# Counselling Service for Students

K. Alwar\*

## Introduction

Counselling in the vague sense of a student approaching his elders like parents or teachers seeking advice and solution to his problems had been in the Indian educational set up down through the ages. But counselling as a more specialized and psychological approach and an effective student service for his growth and development is only a modern phenomenon.

Rogers defines counselling as "A series of direct contacts with the individual which aim to offer him assistance in changing his attitudes and behaviour"<sup>1</sup>.

Shotstrom and Brammer define it as "A self-adjustive process, which helps the client become more self-directed and self responsible"<sup>2</sup>.

In the words of C. Gilbert Wren "Counselling is a dynamic and purposeful relationship between two people in which procedures vary with the nature of the students' needs but in which there is always mutual participation by counsellor and student with the focus upon self-clarification and self-determination by student"<sup>3</sup>.

B.J. Prashantham is of the opinion, "counselling is primarily the particular relationship between people that leads to healing growth and change to be autonomous and caring in living with oneself and others"<sup>4</sup>.

## Nature and Scope of Counselling

The foregoing definitions point out that counselling is a relationship between two persons — the counsellor and the counselee or client. The participation of two persons in a counselling situation makes it different from advising or guidance which take place in smaller or larger groups.

Counselling aims at self-clarification. Every one of us faces emotional conflicts that develop problems for us at one time or the other though the frequency might differ with individuals. In our common experience with young students we realise that they become emotionally more agitated. Working

under such stress and strain they are not able to find out a solution pooling together their inner resources. When they approach the teacher-counsellor, who has relatively more emotional maturity, he helps them unload the emotional burden. Then he proceeds to discuss with them the various alternatives to solve the problem bringing out their full implications. He also enables the counselee to look into his inner self to harness his latent potential. The counselee who has come out of the maze of his emotions becomes aware of his own strength to cope with the situation as he views things with clarity of vision. Counselling is of great value for this self-clarification.

As a result of self-clarification the counselee is able to take a decision all by himself. The counsellor does not decide things for the counselee. What he does is to help the counselee to help himself. Self-clarification, thus, leads to self-determination at which counselling aims.

Self-determination through self-clarification results in conflict-resolution. The release from a psychological tight corner and the concern shown by the counsellor give a healing touch to the counselee. Nevertheless these are only the short term goals.

Counselling in the long run aims at the personality growth of the Counselee and behavioural change. As a result of the experience gained by the counselee in the counselling sessions he should be able to organise himself to face the demands of the problems in the future. If, on the other hand, the counselee makes a bee line to the counsellor every time he is confronted with a problem it would only mean that he has developed a symbiotic relationship. The long term goal of counselling is to account for the growth of the student's personality to face the challenging problems by himself utilising the experiences he has gained from the counsellor. Counselling in the long run, therefore, seeks to make the counselee grow into an autonomous person.

If we are eager to give our youth 'man-making education', counselling is one of the processes to achieve the end. In the development of the autonomous personality of the youth the counsellor is to the counselee what a dew drop is to a rose bud.

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After all, the beauty and fragrance of the rose were already there in the bud.

### **Counselling and Related Concepts**

The term **counselling** has been extensively used to denote a wide variety of student service activities.

#### **Guidance**

**Guidance** consists of service which assist the students with the knowledge and necessary skills to make their academic life meaningful. These services provide information to all the students regarding the educational and occupational opportunities, and personality development. Guidance programme may include orientation of new students. It may also involve help with study habits, such as faster reading, note-making, etc. Ideally speaking, guidance programme should be spread throughout the year.

**Guidance** differs from **counselling**. It provides the basic information which prevents problems or makes the basis for **counselling**. Most of the guidance services are rendered in fairly large groups whereas **counselling** can be carried on only in the face-to-face contact between two persons viz. the counsellor and the counsellee. While in a **counselling** process the decision-making operates at the emotional level, in **guidance** it is confined to the intellectual level.

#### **Traditional Advice-giving**

**Advice-giving** or **advice-tendering** in the traditional sense refers to the formal consultation of the students with the teacher. It consists of the teacher's prescriptions of 'dos' and 'don'ts' for the students. It is not same as **counselling**. Traditional advising is almost sermonising and the teacher's attitude is peremptory. In traditional advising the teacher takes the decision for the student while in **counselling** the counsellor discusses the problem in a democratic spirit, imparts information and allows the counsellee to make his own decision.

#### **Advising/Advisement**

But **advising** or **advisement**, distinct from traditional advising, has become a modern student service. Under this advisory scheme about 15 to 20 students are assigned to a teacher who is the Advisor and the students are the wards. The Advisor working with a smaller group is able to motivate the wards through better personal contacts. He serves

as a faculty friend by reacting sympathetically and with greater understanding. He helps the students in making the best use of the facilities provided by the institution. He also acts as a liaison between the students and the faculty, the principal and the office. In doing so, he helps the wards to solve the academic and administrative problems.

**Advisement** is different from **Counselling**. "Advising" as Norman D. Sundberg observes, is the process whereby a teacher through individual and small group meetings helps the student to make decisions and master his academic and co-curricular situation, the emphasis being on information giving and receiving rather than "deeper counselling methods"<sup>5</sup>. **Counselling** rests chiefly on face-to-face interviews between the counsellor and the counsellee when the latter is disturbed by emotional conflicts that call for greater understanding.

#### **Group Counselling**

As **counselling** is a 'one-to-one relationship', the use of the term 'Group **counselling**' might sound self-contradictory. **Group counselling** becomes possible when counsellees with common problems such as drug addiction could discuss their problems in group without much embarrassment. It can work only at a later stage when the counsellees have built up sufficient confidence in the counsellor.

**Group counselling** is also different from **guidance**. In group **counselling** the interaction between the counsellees is the dominant feature and the emotional and psychological disturbances get discussed at length.

#### **Psychotherapy**

**Psychotherapy** overlaps a great deal with professional **counselling** which deals with personal problems. **Psychotherapy** starts from a medical and not an educational setting. Further it tends to emphasize the serious personality disorders treated by psychiatrists or clinical psychologists. **Counselling** generally deals with normal or near-normal people who are trying to determine what to do in their normal course of lives.

#### **Basic Assumptions of Counselling**

**Counselling** rests upon certain basic assumptions which determine the nature of a particular **counselling** relationship.

First, every individual is unique. No two per-

sons including twins are identical in their emotional and psychological make up. So the counsellor should treat each individual and his problem as a separate one. He should not try to generalise problems and offer 'ready-made-solutions' for the problems. If he does so the personality of the individual who is a microcosm in himself will get discounted. As a result his confidence in the counsellor will be impaired and the counselling process will get stuck up. Counselling will consequently prove fruitless.

Secondly, we must have respect for the personality of the counsellee. Each individual has a role to play for himself and for the society at large. We should remember that "A person is not a being, but a becoming". So we should respect the worth and dignity of the individual counsellee.

Thirdly, counselling aims at understanding and not judgement. A counsellor should not try to label a counsellee with a problem and view his problem as a bag of sin. Every one has problems, big or small, in his daily life. Hence the counsellor should not put on a pontifical or holier-than-thou attitude. When once the problems are worked out the counsellee can be a perfectly normal human being.

Fourthly, counselling believes in self-direction and self-determination. Just as the problem arises out of the individual so also should the solution come from the self same individual. The counsellor acts only as a facilitator to help the counsellee take his own decisions.

Fifthly, counselling is based on the freedom of the counsellee. He is free to choose one counsellor or the other. Even after having chosen a counsellor the counsellee has the freedom to withhold any information about himself or even reject his services altogether. The counsellor should be able to understand his client's (counsellee's) freedom and need not get offended or prejudiced.

Above all the bedrock of counselling is confidentiality. It is professional ethics and a covenant binding both the counsellor and the client. Like the physician in his clinic and the religious minister at the confessional, the counsellor should maintain the secrecy of his clients. He should not divulge any part of the information confided to him unless he has secured the client's consent to do so for any referral.

## Qualities of a Good Counsellor

### (a) Understanding

A good counsellor should be able to understand his client properly. One of the widespread complaints of the youth is that they are not understood either at home or in the college. A counsellor understands the counsellee from the background information, from available official records or references made about the counsellee by others. He understands him from his own observation of the counsellee with an open mind. Further he understands the client from his own statements and actions. Thus a counsellor understands the counsellee as Rev. Fr. Peter Fernando puts it "through the eyes of others, through my own eyes (and) with the person". He should not assume anything about the counsellee.

### (b) Attention and Availability

The counsellor should attend to the needs of the counsellee making himself physically available. He should keep the appointment made with counsellee. He should work with him without any agenda pre-occupying his mind and draining his energy to be placed at the disposal of the client.

### (c) Genuineness or Sincerity

A counsellor should be genuine in all his dealings with the client. He must have a genuine interest in the growth and development of the client. He must make a sincere attempt to understand him and be ready to confess in case he does not understand any part of the counsellee's message. If he really feels that he is not adequate to meet the demands of the problems of the client he should make a clean breast of it to him and could even refer him to other counsellors or even to a psychotherapist.

### (d) Concreteness

A counsellor should make the session a purposeful dialogue for the benefit of the counsellee and should never allow it to degenerate into a gossip. He must be concerned with taking up one problem at a time and enable the client to solve it. He should pay attention to what matters to the client at the present moment instead of allowing any useless mind wandering into the past.

### (e) Friendliness

A counsellor should meet the client with a free and friendly attitude. Through a genuine concern

for the client he could suggest the warmth of friendliness which would encourage the counsellee to open up his mind. A friendly attitude is suggestive of a feeling of equality which always accounts for more purposeful human relationship.

(f) *Willingness to accept*

The counsellor should be willing to accept the counsellee as what he is without any prejudice about him. Accepting the counsellee as he is does not mean that the counsellor gives licence to all the misdeeds confessed to him. It only means that while pointing out the wrongs of the client the counsellor makes himself free from judging him as a good-for-nothing or a doomed person.

(g) *Willingness to Listen*

As listening plays a crucial role in communications and maintaining human relationships a counsellor should be good at listening. It should not be a pretended listening. Nor should it be a superficial or selective listening. It should be total listening with a view to understanding the counsellee completely. While interviewing the client the counsellor should aim at active listening, paying attention to the words (verbal communication) as well as the gestures (non-verbal communication). Prashantham points out that 70% of our communication is non-verbal<sup>7</sup>. Non-verbal communication or body language is the powerful expression of the emotions associated with the message conveyed. If only the counsellor listens to what is said in words and how it is said through gestures and even through marked pauses and silence he can help the counsellee to help himself.

(h) *Confrontation*

Through active listening if the counsellor notices any incongruity in the statements of the client he can point it out to him and make him realise the contradiction. This procedure is called confrontation. It requires assertiveness on the part of the counsellor. Confrontation will make the counsellee relate himself to a purposeful counselling situation. However it should be used separately.

(i) *Empathy*

This is a vital attitude and a skill in any counselling relationship. Empathy is intellectual identification with the client to understand his inner world. It is different from sympathy which involves a tinge of pity. The client does not want pity from the counse-

lor as it would be demeaning to his personality and he will not unfold his problem candidly. Further while expressing pity the counsellor will lose his mental poise in emotional identification. Empathy on the other hand involves the ability to understand and express effectively both in verbal and non-verbal communication.

(j) *Ability to strengthen decision-making*

The counsellor should have a resilient mind to accept the fact that every human being is endowed with inner resources to find a solution for his own problems and to learn to live by his decisions. He should accept that man is not only a social animal but also a decision-making animal. It should be his concern to strengthen this decision-making ability of the counsellee. He should be a catalytic agent accelerating and reinforcing the process of decision-making.

(k) *Confidentiality*

To maintain the secrets of the counsellee is a moral obligation and professional ethics of a counsellor. It is respecting and maintaining the dignity of the client. The success in this respect is the very basis of success of a counsellor.

### **Types of Counsellors**

Depending on the degree of skill achieved and the level of specialisation, we have different kinds of counsellors :

#### *Informal Counsellor*

Any one who has respect for the personality of another person and concern for his growth can offer some counselling service, in the ordinary sense, to the emotionally over-burdened person. Still he could do it better and in a meaningful way when some training is given to him. Such a counsellor is called an "informal counsellor".

#### *Non-Specialist Counsellor*

If counselling is done as part of the work of professional people like teachers, physicians, ministers and lawyers, after their undergoing short courses on counselling we call the practitioner, a "non-specialist counsellor".

#### *Professional Counsellor*

A "professional counsellor" is one who carries on counselling work as a full-time job after specialized training. His training should consist of a Mas-

ter's or a Ph.D. degree in Psychology or Counselling Psychology.

Though the presence of a professional counsellor on the college campus is an ideal, the workable proposition is to have non-specialist counsellors only.

### Counselling Process

The counsellee with a problem fixes an appointment with the counsellor. At the appointed time and place the counsellor makes himself available. The room for the session should provide for adequate privacy. This is needed for the initial interview.

The counsellor receives the client cordially and in a relaxed way and keeps himself at his disposal. He gives the counsellee the assurance that all the information confided to him will be treated confidentially. It is a contract on which counselling proceeds. This is called setting up facilitative relationship.

The counsellor is fully alive to the problems of the client listening to him actively. He makes the interview non-directive so that the client pours out his emotional stress. During this process the goals of the counsellee are identified and determined.

If the counsellee takes a decision the counsellor asks him to propose a measurable and concrete goal that could be achieved within a specific time. It is to this end that he applies all the counselling strategies.

It is better to have an interview for a period between half an hour and one hour. If the counsellor feels that the nature of the client's problem needs further sittings he can terminate the interview. If he becomes aware that the nature of the client's problem is of graver import he could refer his case to a more experienced Counsellor or to a Psychiatrist.

### Case Study

Counselling service in Aditanar College of Arts and Science, Tiruchendur has been a continuous and evolutionary process. When the idea of counselling service for the students was first mooted in the seventies we were faced with all the difficulties of scepticism and resistance that a new concept confronts before it gains acceptance. Members of the faculty thought that it would not work in Indian situations though it worked well in America and the West. They believed that it would belittle the importance of the teacher who has been traditionally ex-

pected to solve the problems of the students through his decisions which are the result of his vast knowledge, experience, maturity and selflessness. If students were to take decisions by themselves it would mean that the teacher was shirking his moral duty of solving the problems of the students through his efforts.

Students on the contrary felt that it was a new device to bring them more and more under the control of the teachers who would be counsellors. They thought that the counsellor would use the information confided to him to snub him or pass it on to the Principal. Hence their belief was that the student who once met a counsellor would never be free from the control of the faculty members. This misapprehension made itself manifest in the demand for the abolition of counselling service when the Students Union was first formed.

To obviate the initial obstacles more and more group discussions on counselling service were arranged both for the members of the staff and the students. Role plays were also staged to explain the role of counselling as a student service. The Hostel Directors' Workshop held in the college stressed the need for counselling in the hostels. A four day course on counselling for college teachers conducted under the auspices of the Youth Welfare Department of Madurai Kamaraj University and led by Rev. Fr. Peter Fernando who had done his Ph.D. in Counselling went a long way in clarifying the concept of counselling to the participants. Gradually the need for counselling was felt by the staff and the students of the college. At present counselling as a student service has become fairly well established in the college.

There is a good sprinkling of non-specialist counsellors on the staff of the college. The then Principal, Prof. R. Kanagasabapathy underwent training in counselling for two weeks held under the aegis of the USEFI, Bangalore. The present author had training in counselling for two weeks conducted by the AIACHE in Bangalore. He also underwent a six week course in counselling at the Christian Counselling Centre, Vellore. Similarly four other teachers of the College undertook short courses in counselling. The management generously came forward to give all financial backing for the various training programmes. There is thus a good team of non-specialist counsellors. The presence of a number of counsellors enlarges the scope of choice for the students and thereby stimulates voluntary ap-

proach for counselling service, a basic requirement for effective counselling.

Individual counselling is given to counselees who voluntary fix an appointment with the teacher-counsellor. Sometimes either the Principal or the Advisor refers cases of counselling to the counsellor. The student so referred makes a prior appointment with the counsellor for a working session. Counselling takes place outside the class hours in the evening in classrooms which provide reasonable privacy or at the residence of the counsellor if it suits the counselee.

Besides individual counselling Group Counselling is also arranged every now and then. Usually at the beginning of the academic year Group Counselling for students who are frustrated because of their failure to secure admission in professional colleges is arranged. In recent years the problem of a number of students not getting the course of their choice has become pronounced and hence Group Counselling is arranged for them. In summer, Group Counselling courses are conducted for students who have common problems like irregular attendance, lack of concentration, indifference in studies, etc. As a result of this it is generally felt that students are able to make a better adjustment in their academic pursuit and the need for administering more punitive measures to the students has been reduced.

Counselling in the college is closely linked with the advisory system. Student advisors who take care of the academic progress of their wards and act as liaison between the student and the administration sometimes happen to be counsellors themselves. This enables the students to approach them for counselling help to discuss their personal problems.

To make counselling more effective, periodic meetings amongst the counsellors are also arranged. On such occasions the general problems that are noticed among the students are discussed from an academic stand point. Special care is taken to maintain confidentiality and the names of the students and their particular problems are never mentioned. Such meetings are also held when specialists in the field happen to visit the college. Further the plan of counselling work is also prepared in these meetings under the guidance of the Principal. The Co-ordinator of Student Services ensures that counselling service is made available to the students throughout the year.

## Conclusion

The growing need for developing human resources amongst our youth has been greatly recognized. Counselling has been accepted as a strategy to bring out the inner potential of the young students. It paves the way for the youth to develop their personality with vast scope for proper adjustment to their environment for achieving greater things. As Swami Vivekananda avers "if you do not allow one to become a lion, one will become a fox". Let us hope that our counselling efforts will turn our students into a lionine order of men and women.

## References

1. R. Carl Rogers. *Counselling and Psychology*. Houghton Miflin, Boston, 1942. Quoted by Prem Pasricha in *Guidance and Counselling in Indian Education* NCERT, Delhi, 1976 p. 2
2. L. Everett Shotstrom and Brammer, Lawrence M. *The Dynamics of the Counselling Process* McGraw-Hill Book Co., New York 1952. Quoted by Prem Pasricha *ibid.*
3. C. Gilbert Wrenn. *Students Personal Work in College*. Roland Prem, New York 1951 p. 60 Quoted by K.J. Mahale in *Selected Readings in Student Services for Indian Universities and Colleges*. Ed. Clyde A. Parker U.S.E.F.I. New Delhi 1973 p 249.
4. B.J. Prashantham, *Indian Cases in Therapeutic Counselling*. Christian Counselling Centre, Vellore. 1975, pp. xi - xii
5. Clyde A Parker *ibid.* p. 139.
6. R. Kangasabapathy. *Counselling. A Report on a short Course on Counselling* Ed. Madurai Kamraj University, Madurai 1974 p. 41
7. Prashantham, B.J. *ibid* p. 2.
8. Vivekananda. *Education* Ed. T.S. Awinashilingam Sri Ramakrishna Vidyalaya, Coimbatore. 1976, p. 5.

## Bibliography

1. Fuster, J.M. *Psychological Counselling in India*. Macmillan and Co., Otd., Bombay, 1964.
2. Kochhar, S.K. *Educational Vocational Guidance in Secondary Schools*, Sterling Publishers (P) Ltd., Jullundur, 1967.
3. Parker, Clyde A. *Selected Reading in Student Services for Indian Universities and Colleges* U.S. Educational Foundation in India, New Delhi 1973.
4. Surjit Kaur. *Foundations of Counselling and Guidance* Sterling Publishers (P) Ltd. New Delhi 1971.
5. Torrance, E. Paul. *Guiding Creative Talent*. Prentice-Hall of India Private Ltd., New Delhi, 1969.

## 'INFECTING' RELATIONSHIPS ...

A.V. Afonso\*

Academics read books for variety of reasons — some read them as part of their teaching job, others to review them for a journal, and still others to ensure they are up-to-date on knowledge of their disciplines. Again, there are various ways of reading the new publications that 'hit' the market. Some read them slowly ensuring no word is lost (like the good Ph.D. student), others read one or few chapters that seem to 'say' something new, and still others (the 'gifted' readers) 'read ideas' in the book, thereby managing to return to the library a tome of 500 odd pages in a day or two.

I read books for the reasons listed above and many others. The books I pick up for travel in trains or at the airport lounges, by and large, are meant to work on the 'sub-conscious mind'. Whether they leave a deep or shallow impression is left to my wife or psychoanalyst to decide. There are books, however, that you come across for academic or non-academic purpose, but their reading gets 'personalized' — thereby one gets involved with the author's thoughts — one develops likes and dislikes. A bad book (I am not referring to books that waste so much white paper and precious printing ink) with deliberate half-truths and irrational arguments, angers a reader. And a good book makes you go for the pencil to put a little mark on the page (sorry, dear librarian) where an impressive thought is flashed or a cogent argument is made, or a new dimension is given to an ongoing debate. There are some books that both question an ongoing debate and/or provide a theoretical framework for such a debate which was hitherto forgotten or never addressed to. The most fascinating books are those that attempt to 'transcend' or 'go beyond' the established conclusions. They are the ones that seek to evaluate the 'official doctrines' that sell in the market of present intellectualism.

Books that perform one or many of the above tasks leave a lasting impression on the sensitive minds that are concerned about the present intellec-

tual climate and seek alternative thought patterns to get out of the present 'malaise'. One book happened to reach me (more by chance than by choice) in due course of discharge of my duties and seems to have left a deep impression on me. If one can ignore one's economic predilections, I wish to record my sense of appreciation to the publishers (Kluwer Academic Publications, Dordrecht, Netherlands) for publishing the volume whose reading in the present Indian context is imperative.

S. Kay Toombs' *The Meaning of Illness* is one of those books that contains ideas, seminal and critical, that give both a new direction as well as provide a theoretical framework for understanding of the established norms. The book that provides a phenomenological account of the different perspectives of physician-patient relationship has come as a significant volume mediating between the recent Supreme Court judgement and Medical Ethics. Any-one reading the book (which requires great patience as the language used is full of phenomenological "brackets") will feel convinced that the Supreme Court should not have interfered with the legal provisos in the patient-physician relationship.

The book's most important chapter is the fourth and last one, entitled "Healing Relationships", where the author lays bare what constitutes illness. The physician-patient relationship is a unique kind, which he describes as 'face-to-face' "in that the mutual involvement in another's biographical situation (the shared world) is grounded in the patient's experience of illness". (p. 110) Clarification of three concepts, namely, (i) what constitutes illness; (ii) why a sick person approaches a physician; and (iii) what is the goal of medicine — will suffice to show why the patient-physician relationship is unique and should not be allowed to be contaminated by 'court decrees'.

The three issues are so interconnected that a 'tri-lectical' relationship exists between them. Healing of the patient is perceived as the goal of the relationship between patient and physician. This 'healing' refers to the perceived illness or 'dis-ease' (sic unease) by the patient. In other words, the ill-person

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comes to the physician seeking relief from distress due to 'dis-ease' experience, so that he can return to what otherwise constitutes for him a satisfactory life. Hence he comes to the physician to communicate his 'dis-ease experience' so that it makes sense to him. In the words of Toombs: "What the patient seeks is not simply a scientific explanation of the physical symptoms, but also some measure of understanding of the personal impact of the experience of lived body disruption. In communicating with the physician, the patient seeks to convey the meaning of illness in the context of a particular biographical situation." (p. 111)

'Illness' therefore is not defined in pathophysiological terms (sic objective) for which diagnosis and cure are seen as focal points. The de-emphasis on the 'objective bodily disorder' and focusing on 'perceived illness' is important in the context of health care as the objective of medicine is not merely 'restoration of bodily integrity' but restoration of 'wholeness' or 'patient's integrity as a human being'. "If 'cure' is perceived to be the goal, disease is the enemy and the patient's body the battlefield" we are likely to forget the person as such. And that is what seems to have happened in large public hospitals where patients are kept 'alive' even when they are dead.

This qualitative shift in understanding what constitutes disease explains the radical distinction between machine-machinist and patient-physician relationships. It also allows one to understand what constitutes the goal of medicine in cases where restoration of health or removal of bodily disorder is not an attainable end (e.g. chronic disorders or incurable illness). It is precisely because of our failure to understand the proper meaning of illness from the patient's perspective that 'inability to cure' is seen as an uncomfortable failure on the part of physicians and paramedics. No wonder that patients suffering from terminal illnesses feel 'isolated', 'unwanted' and 'abandoned'. S.K. Toombs so poignantly reminds us when he writes : "If cure of "disease" is taken to be the overriding goal of the medical encounter, intractable illness poses a frustrating challenge to the physician's capabilities. However, if alleviation of dis-ease and suffering is perceived to be the end of the healing relationship, there is much the physician can do. Indeed, the doctor is perhaps one of the most effective allies that

the patient can have in the struggle to deal with the limitations imposed by illness". (p. 115)

One should remember that in this vast world there are more patients with incurable diseases than curable ones. And bodily decay is part of the growth process that every individual has to suffer till the 'end'. One is reminded of the most important distinction that bio-ethicians make between 'curing function' and 'healing function' — one is fragmented, the other holistic, one is impersonal, the other person-oriented. In brief, healing a person does not always mean curing a disease. No wonder that most physicians see their healing function extending even to the dying patient. The fundamental distinction between 'healing' and 'curing' on the basis of a special and unique relationship between patient and physician, helps one to distinguish between clinical medicine and medical sciences *per se*.

The book, though costly for its size (pp. 161, DFL 75) has extensive Notes containing comments and references that could have formed a book in itself. Toombs' book should be read by all connected with medicine (which 'includes' all humans) and specially doctors and Supreme Court Judges.

## UNIVERSITY NEWS

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## The Light of Learning

Justice Ranganath Misra, Chairperson, National Human Rights Commission, delivered the Convocation Address at the Seventh Convocation of the Indira Gandhi National Open University, New Delhi. He said, "Light dispels darkness; knowledge gathered through education removes darkness from within and gives enlightenment. That is why from early stages of development, mankind realised the importance of education and learning and devoted great attention to them. The Goddess of learning was one of the first to be worshipped by man". Excerpts

Nature has endowed man with the facility of acquiring knowledge through education. While in the animal kingdom, knowledge is gathered by direct experience, for the homosapiens this is available through the experience of other people. Light dispels darkness; knowledge gathered through education removes darkness from within and gives enlightenment. That is why from early stages of development, mankind realised the importance of education and learning and devoted great attention to them. The Goddess of learning was one of the first to be worshipped by man.

At the time of partition, around 1947, India had a population of about 350 million. In less than half a century from that time our population has crossed the limit of 995 million and by the end of the century, we would have well crossed the figure of 1000 million. Going by the literacy rate, which is indeed taken as the measure of learning, out of 995 million now, more than 400 million are illiterate. That is an astounding figure. In fact, it is 50 million over and above the entire population of the country in 1947. Our Constitution fathers dreamt of an egalitarian society. The preamble to our Constitution declared the solemn resolution of the people of India to secure to all its citizens:

- Justice—social, economic and political;
- Liberty of thought, expression, belief, faith and worship;
- Equality of status and of opportunity; and to promote among them all
- Fraternity, assuring the dignity of the individual and the unity and dignity of the Nation.

The Constitution makers realised that the resolution of the people of India would not be achieved and the dignity of the individual could not be assured unless a reasonable standard of education was provided to every individual. Article 45 in Part-IV of the Constitution required the state to endeavour, within a period of 10 years from the commencement of the Constitution, free and compulsory education for all children until they complete the age of 14 years. Providing compulsory primary education to every child has till now remained a dream though 50 years, which are 5 times of the period specified in the Article, have run out. The Supreme Court has already pronounced, that right to education is a fundamental right. That implies that it is enforceable through the judicial process and the state has an obli-

gation to provide education. For half a century, we have not been able to gear up the state machinery to meet the challenge.

If compulsory education for all children upto the age of 14 years is provided, it would, by any calculation, cover upto 200 million children. That would have its reflection in the increased demand for higher education. The 200 and odd universities of this country which at present take about 6 per cent of those eligible for higher education and are not in a position to meet the existing demand, would fall far short of the pressure that would get generated by the increase in the number of school going children. At the last Convocation, the then Minister of Human Resource Development had stated that with a 5 per cent growth in the student population in the country, the formal education system would soon be grossly inadequate to cater to the needs of learning and in providing access to the rapidly increasing fields of knowledge.

To meet a situation of this type, education planners, while toying with the idea of offering quality education to a much larger section of the population that remains outside the university system, set themselves to find a way out. It is said that in the early 1970s, a seminar was organised by the Government of India to deliberate over this aspect and a working group was set up which recommended the establishment of an open university. Under Act 50 of 1985 of the Parliament, Indira Gandhi National Open University came to be inaugurated in September, 1985 by the then Prime Minister, Shri Rajiv Gandhi. This university is, therefore, running its 11th year of existence. In the life of a university, a decade is indeed is not much

(Contd. on page 20)

# SPREADSHEET

## Social Indicators of Development in India through the Planning Era (1)

Item	Pre-Plan	II Plan	III Plan	IV Plan		V Plan	Annual Plan		VI Plan		VII Plan		Annual Plans		VIII Plan (Projections)	
	1950-51	1960-61	1965-66	1970-71	1973-74		1978-79	1979-80	1980-81	1984-85	1989-90	1990-91	1991-92	1992-93	1996-97	
<b>Population size, composition and growth</b>																
Total population census/mid-year (in millions)	361.1	439.2	493.2	548.2	596.1	660.3	675.2	683.3	750.4	827.4	846.3 (861.4)	862.5	878.6	913.7	941.37	
Annual exponential population growth rate	1.25	1.96	2.20	2.20	2.20	*	*	2.22	*	*	2.14	1.91	1.87	1.78		
Sex ratio (number of females per thousand males) Combined	946	941	*	930	*	*	*	934	*	*	927	*	*	*		
Rural	965	963	*	949	*	*	*	951	*	*	939	*	*	*		
Urban	860	845	*	858	*	*	*	878	*	*	894	*	*	*		
Urban population as per cent of total population	17.3	18.0	*	19.9	*	*	*	23.3	*	*	25.7	26.0	*	28.3		
<b>Factors in population growth</b>																
General fertility rate (live births per thousand women of child-bearing age)	*	201.0	*	192.0	*	175.0	*	154.0	133.0	*	140.9	130.3	*	*	113.0 (2011-16)	
Total fertility rate: Combined (average number of births in the life time of a female)	*	*	*	5.2	*	*	*	4.5	4.5	3.8	3.6	*	*	*	2.0	
Rural	*	*	*	5.4	*	*	*	4.8	4.9	*	*	*	*	*	*	
Urban	*	*	*	4.1	*	*	*	3.3	3.4	*	*	*	*	*	(2000 AD)	
<b>Couple protection rate (per cent)</b>	*	*	3.1	11.5	*	22.5	22.3	24.4	32.1	43.3	44.1	*	43.4	60		
Birth rate (number per thousand) Combined	41.7	41.2	39.6	36.9	33	33.7	33.7	33.9	32.9	30.2	29.5	29.0	*	*	25.7	
Rural	*	*	*	38.9	33	35.1	35.1	35.6	34.3	31.7	30.9	30.7	*	*	*	
Urban	*	*	*	30.1	28	27.6	27.8	27.0	28.1	24.7	24.3	23.1	*	*	*	
Cumulative number of total births averted since 1956 in thousands	*	36	635	6,823	20	*	*	44,190	80,072	123,454	142,900	149,340	153,600	*	*	
Contraceptive prevalence (number of users in thousands)	*	*	582.0	1,963	1	*	*	3,809	10,744	16,952	17,905	14,232	*	*	*	
<b>Mortality</b>																
Death rate (number per thousand): Combined	22.8	19.0	18.2	14.9	*	14.5	12.8	12.5	11.8	9.7	9.8	10.0	*	*	8.7	
Rural	*	*	*	16.4	*	14.1	13.7	13.7	13.0	10.5	10.6	10.8	*	*	*	
Urban	*	*	*	9.7	*	8.1	7.9	7.8	7.8	8.8	7.1	7.0	*	*	6.0	
Infant mortality rate (per thousand live births):	182.5	135.1	151	129.0	13	120.0	114.0	110.0	97.0	80.0	80.0	79.0	*	*	68.0	
Male	190.0	142.3	*	129.0	12	119.0	113.0	110.0	96.0	*	*	*	*	*	*	
Female	175.0	127.9	*	129.0	13	121.0	115.0	110.0	98.0	*	*	*	*	*	*	
Rural Combined	*	*	*	138.0	13	130.0	124.0	119.0	114.0	86.0	87.0	85.0	*	*	*	
Male	*	*	*	137.0	13	129.0	123.0	119.0	113.0	*	*	*	*	*	*	
Female	*	*	*	138.0	14	131.0	125.0	119.0	114.0	*	*	*	*	*	*	
Urban Combined	*	*	*	82.0	8	72.0	65.0	62.0	66.0	50.0	53.0	53.0	*	*	*	
Male	*	*	*	83	78	65	63	68	*	*	*	*	*	*	*	
Female	*	*	*	81	82	71	65	62	64	*	*	*	*	*	*	
Under 5 mortality rate (percentage of population in the age group)	*	*	*	51.9	*	51.0	*	41.2	38.4	33.3	*	*	*	*	*	
Maternal mortality (per 1,00,000 live births)	*	*	*	376,418	*	500	*	*	550	*	*	*	*	*	*	
Life expectancy at birth : Overall (years)	32.1	41.3	41.3	45.6	4	49.2	52.3	54.4	58.2	58.2	59.9	58.2	*	*	60.6	
Male	32.4	41.9	41.9	46.4	51	49.5	52.5	54.1	56.6	58.6	55.9	57.7	*	*	60.1	
Female	31.7	40.6	40.6	44.7	4	49.0	52.1	54.7	56.1	59.7	59.9	58.7	*	*	61.1	

\*denotes information not available

Notes: (i) Years representing as column heading do not always correspond to the respective Five Year, or, Annual Plan periods (e.g. year 1978-79 for the Fifth Plan period).

(ii) Again, the data presented generally pertain to the years indicated in the table though in some cases they pertain to the periods close to those years.

Source: EPW Research Foundation: Social Indicators of Development for India - 1, Economic & Political Weekly, May 14, 1994.

(contd. from page 17)

time. The progress made in this decade, both vertically and horizontally, by this university is indeed spectacular. The First Convocation was held in February 1989, where 1040 students received their diplomas. The fact that we have gathered here for the Seventh Convocation shows that there has been an Annual Convocation every year thereafter. By 1995, 372 courses have been launched and the number of students admitted to the university has now exceeded 200 thousand.

With the advancement of technology and by the success of our indigenous efforts, we have access today to developed system of communication through the satellite. Access thereto has facilitated the reach of the education programmes from the Open University to its various regional and study centres. The wide choice of subjects offered by the university is indeed an indication of its sufficiency and a guarantee of the successful development and progress of the system. The achievements of a decade project both the success of the system as also the capacity of the management. But for the genuine and dedicated efforts on the part of the fraternity at the university this would not have been possible. The need of our country for spread of education with appropriately maintained quality can be best served by universities of this type.

After the establishment of this university, in a decade's time, all the states should have set up their own universities. As it appears, states like Maharashtra, Andhra Pradesh and Rajasthan do have their respective universities, while preparation is on in some states to have such universities and other states have not yet planned for setting up such uni-

versities. Expansion of education through Open Universities set up by every state would indeed be a big step for the cultural revolution in our country. While emphasising traditional education, these universities can also switch over to technical and scientific education and train the young men and women of the nation on the right track.

Higher education has always been expensive to provide. It is a paradox that while for primary and secondary education, we are prepared to spend more by way of cess and fees, there has been a freeze of the fee in the college and university levels. The community is averse to the idea of a rise of expenses at such a stage.

As a result, the state exchequer has been over-burdened; the spread of higher education has suffered. It is appropriate that the right direction is generated and a requisite perception is developed. An Open University of the type you are in can indeed operate as a guide and stimulator for all the state universities and with appropriate coordination, both organisational and educational and requisite economic backing, astounding results can be achieved. I am sure your university is able to take the leadership, show the way and help the country to march ahead.

Ours is a continuing civilization of more than 6000 years. While all other civilizations have been born after ours and have died, ours has lived through centuries. Of course, there have been ups and downs. It is universally acknowledged that we reached great heights, ascended the peaks in every branch of learning, derived perceptions which no other nation could approach. Our heritage has, therefore, its own worth. The legacies and traditions have their own message to convey. Through the educational process every person can, therefore, be

acquainted with our legacies and traditions and be familiar with our heritage. Due emphasis has to be laid on this exposure.

We had, in our country, understood that without character the fruits of education would not be realised. Therefore, due emphasis on character building through education was always laid. Our ancestors had also understood that the test of learning was best manifested in conduct orientation. I hope and trust that your Vice Chancellor — learned as he is — and his team of educators are prepared to place due emphasis on this aspect.

Ours is a large country with a huge population. We have ample resources and capable man-power. In order that we may come to the forefront in the emerging global situation, we need understanding, coordination and determination to build up a powerful India. To live in the world of tomorrow, as a great nation it is you — the young men and women of today who have to work as soldiers. If there is any meaning in the statement that the fate of a nation is shaped and built in the classroom, it perhaps has to be proved by you, the teachers and the taught of a university of this magnitude and proportion. Our educational system has wrong directions. We have to make appropriate amendments and have to gear-up the movement. Every young man and women must seriously attempt to develop his/her personality to the fullest extent and the mechanism of education must be so conditioned that the result should be unfailingly achieved.

Smallness in thinking must be given up. A national perception has to be generated on all major aspects and full attention must be focused upon pushing India to the fore-front.

## CAMPUS NEWS

### Effective Learning and Teaching in Higher Education

A workshop on Effective Learning and Teaching in Higher Education was organised by the Association of Indian Universities (AIU), in New Delhi recently. Sponsored by the Commonwealth of Learning (COL) (Canada) and the National Assessment and Accreditation Council (NAAC) India, the workshop was intended to train the trainers from selected twenty universities, with the help of a Resource Guide developed by the then Universities' Staff Development and Training Unit (presently UCoSDA) of the Committee of Vice-Chancellors and College Principals (CVCP) UK. Seventeen senior faculty members from various central, state, deemed and open universities and AIU participated in the two-day workshop. The following were the objectives of the workshop.

- To familiarise with various key concepts and features associated with 'active learning', and reflect on the implications of active learning for teaching in higher education.
- To explain active learning and studying, study skills, and various approaches to learning, particularly in higher education; and discuss the strategies for encouraging students to adopt a 'deep' approach to learning.
- To discuss various strategies to promote active learning in a variety of instructional settings : course design, teaching-learning methods (face-to-face lectures, distance ed-

ucation, small group learning, large group learning, practical classes, projects, etc), and assessment.

- To design and present a model of the teacher in higher education; discuss the principles for improving the quality of teaching at higher education; and consider factors teachers ought to keep in mind/adopt so as to facilitate active learning by students of higher education.

Prof. K.B. Powar, Secretary General, AIU, in his opening remark pointed out that professional development of teachers of higher education in areas of effective learning and teaching was assuming considerable significance under the growing thrust on quality assurance, the emerging need for institutional and programme accreditation, and the common expectation of an acceptable standard of higher education. The present decade, he said, had seen considerable changes and diversifications taking place in Indian higher education, and the Association of Indian Universities, as an apex body of the institutions of higher learning, had been trying through these years to bring into focus the important issues confronting higher education and provide forums for their deliberations on national level. Improvement of quality of education through effective learning and teaching was an on-going thrust area of the Association, he added.

Inaugurating the workshop, Prof. A.S. Gnanam, Vice Chancel-

lor, Pondicherry University (and President, AIU and Chairman, NAAC) noted that there had been increasing quantitative expansion of higher education in India at the cost of quality; and teaching-learning was one of the important criteria to examine quality. Traditionally formal training of teachers was not considered; however, the perception was gradually changing, and intensive and continuous staff development programmes were needed to keep pace with the changing scenario of higher education, he opined. While teachers needed to be given intensive orientation on organising effective teaching, the students needed to be equipped with skills to communicate, assimilate and reflect upon. The teaching-learning process had to go beyond the formal class lectures — to include assignments, formative evaluation, seminars, home work, group learning, etc. Besides our own conscience, global competitiveness also pressurised us to look at teaching-learning afresh; and effective/active learning was an emerging area of learning to be practised, he added.

The workshop objectives were introduced by Prof. Arun S. Nigavekar, Director, National Assessment and Accreditation Council (NAAC). He pointed out that after 1992, when first round of such workshops was organised, the COL took up the matter with ODA, and the CVCP of UK was asked to develop self-instructional training modules for staff development on active learning. Twenty universities in India were supplied with those materials

through the Indira Gandhi National Open University (IGNOU). Though the materials were self-instructional, they were not useful for distance education purposes. Hence, subsequently in 1994 the Nottingham University developed the Resource Guide which forms a major base for the present workshop. These materials have to be effectively used, especially for chalking out strategies to deal with large classes in India. Further, these materials may need to be adapted to Indian conditions and some fresh materials may need to be developed.

The workshop was conducted under four major thematic areas/sessions. In the first session, an introduction to "active learning" was presented by Dr Santosh Panda, Director (Research), AIU. As all the participants were not from the discipline of education, an introduction was given to the development of various teaching-learning strategies within the broader framework of educational technology, and the contemporary need to consider various dimensions and processes involved in active learning. Besides, a brief discussion was undertaken on the present scenario of higher education in India, the emerging issues related to teaching-learning, and the responsibilities of higher education teachers with regard to coping with the growing number of students and large classes on one hand, and maintaining quality in student learning on the other. The participants brought into the discussion experiences from their own disciplines (engineering and technology, management, English literature, education, psychology, humanities, distance education, etc.) which enriched the comprehension of the dimensions and pro-

cesses involved in active learning. Active learning was analysed in the contexts of searching for meaning, taking responsibility for learning, developing skills (problem solving, interactional, communication, etc.) needed for effective learning, and relating learning to social and work situations. Various related concepts, viz. flexible learning, open and distance learning, cooperative learning, experimental learning and the like were also examined. The session also provided a background (and base) to further discussions on active learning and studying, ways and means to promote active learning, and delineation of a model of higher education teachers and professional development within the given social context and the national system of education.

In the second session, Prof. Mohan B. Menon, the then Director, School of Education, Indira Gandhi National Open University and presently Chairman, National Open School focused on various approaches to learning like deep and surface approaches, and the strategies involved in promoting deep approaches to learning and active learning. While deep approach would call for development of effective conceptual understanding, active learning would necessitate attitudinal changes among the teachers to focus more on the process of learning which was more imaginative and student-centered. Within the framework of adult learning, active learning ensured "engagement" with ideas and information being presented, and focused on the "quality" of that engagement. A variety of teaching-learning contexts were presented and an interactive discussion followed focusing on the

strategies involved in promoting active learning in those situations. Active learning stressed more on the learner and the learning process, rather than the subject content. While during the sixties individualised learning strategies got developed and implemented which is dominating teaching-learning in higher education even today, there is a need now to dispel individualisation and develop cooperation and team work in learning. Cooperative and collaborative learning promote active learning, develop individual and team responsibility, and encourage sharing of experiences and promotion of experiential learning. Such learning, instead of becoming theoretical, linked individual learning experiences with the real life situations.

Prof. K.L. Kumar, Coordinator, Quality Improvement Programme, Indian Institute of Technology, Delhi, in the third session, focused on the various strategies involved in the promotion of active learning. Various instructional objectives were discussed; course design, and sequencing and structuring of contents were elaborated within the framework of "objectives" so as to achieve high level of objectives like application, problem solving, synthesis and evaluation. Various strategies involved in teaching in large classes, small groups, practical classes, and for the promotion of independent study were discussed, keeping in view the Indian colleges and universities and the problems associated with numbers, resources and the socio-cultural milieu. Factors which promote as well as inhibit active learning were noted, and emphasis was laid on promotion of facilitating factors like interesting

subject matter, formative evaluation and frequent feedback, sharing of experiences, individual and team responsibility, problem and assignment-based teaching/learning, and the like.

The session was followed by a video presentation on "Enabling Active Learning in Small Groups" produced by the University of Nottingham. Various video extracts on openings, listening skills, skills in responding, questioning, structuring, and closing were discussed among the participants in the video room.

The fourth session was devoted to a discussion on a model of teacher and professional/staff development in higher education in India, facilitated by Dr. Santosh Panda, AIU. Various staff development programmes in India undertaken by the Academic Staff Colleges, IITs, TTTIs, ICAR, and IGNOU and the resource materials developed by them (especially IGNOU) were highlighted. It was felt that a teacher, in the context of active learning, had the responsibility of enhancing students' capabilities and work-related skills; using experiences of students as learning resources; encouraging cooperative learning; promoting responsibility in learning; engaging with values and motives; fostering open, flexible and outcome-based assessment; developing the needed learning environment; and evaluating and further improving teaching and learning. These responsibilities required for promotion of active learning necessitated expansion of the scope of the perception of staff development in higher education as well as the strategies involved in both for organising such programmes and for training the trainers of these

programmes. It was widely felt that there was an urgent need to rehaul and redesign the existing staff development programmes, develop both print-based and audio-visual resource materials (keeping the Indian teaching-learning situations, teachers and learners in view), and devise formative and summative evaluation as well as feedback mechanisms for such programmes so that quality of teaching-learning in higher education could be improved.

Besides being actively involved in discussions and being trained in promoting active learning, the following suggestions were made by both the participants and resource persons :

i) The existing materials (12 modules, resource guide, and the video programme) were thoroughly discussed and were found very useful to teachers of all disciplines/subject areas. However, most part of the materials (especially the extracts and workshop transparencies) needed to be adapted/transformed keeping in view the Indian teaching-learning contexts.

ii) Additional materials on higher education scenario, and teaching profession and staff development in higher education in India needed to be developed afresh. Further, the materials on distance education/open learning had to be rewritten and fresh materials developed to suit the Indian distance teachers and learners.

iii) Besides the existing western-based research findings, Indian research findings had to be incorporated into the materials so as to ensure context-specific and interesting reading.

iv) The existing self-instructional format had to be redesigned and reoriented to the perceptions, acceptability and socio-academic milieu of the Indian higher education teachers.

v) The entire exercise had to be perceived within the framework of quality improvement in higher education in the country.

### **CSIR-NGO Tie Up on Medicinal Databases**

The Council of Scientific and Industrial Research (CSIR) proposes to take up a scientific project in collaboration with a non-governmental organisation. The aim of the project is to tap the data collected by the Ahmedabad-based NGO on the knowledge gained by villagers, particularly tribals in different parts of Gujarat on herbal medicines.

The NGO, run by Prof. Anil Gupta of the Indian Institute of Management at Ahmedabad, has so far prepared 4,000 databases. Under the proposed agreement, CSIR scientists would screen them and conduct further research to identify the active principles in the plant materials and develop the technology for the production of drugs based on them. Any profits that get generated from the project are to be shared with the community from which the information was obtained.

Dr. R.A. Mashelkar, Director-General, CSIR, said the objective was two fold : to establish links between the formal and informal systems of knowledge and to address the problem of bio-piracy by ensuring that the benefits of indigenous knowledge remained within the country and were not tapped by outsiders.

He said it was also proposed to launch a major programme under which 11 chemical and biological laboratories under CSIR would work in unison to screen and develop drugs from 400 other plants, that had already been identified as having bioactivity potentials.

Focussing on the patents issue and its ramifications for the scientific community, Dr. Mashelkar said the thrust of CSIR was to help not only its laboratories, but also the country as a whole to prepare itself well before the new intellectual property regime came into force in 2005.

Already, the number of patents coming out of CSIR had increased substantially. While those filed within the country had increased from 240 in 1994-95 to 2770 last year, those filed abroad had gone up three fold from 20 to 60.

A major problem was a lack of adequate patent literacy among scientists, mainly because the traditional value system, which gave more importance to publication in scientific journals than patenting, persisted. There was also a gross shortage of patenting facilities in the country.

Among the various scientific disciplines, the chemical sciences currently accounted for 75 per cent of the patents that had been filed. Biological sciences were now picking up. The major problem was with regards to the engineering and electronics sectors, he added.

He said there could be no two opinions on the fact that a strong intellectual property regime would be in the best interests of the scientific community. It was essential that society learnt to "salute" innovators and realise

that knowledge would create wealth.

### **IGNOU to Train Panchayat Members**

The Indira Gandhi National Open University (IGNOU) proposes to organise a massive programme of education and training for the elected members of Panchayati Raj institutions. The mode of education and training will be through distance education. The project is being sponsored by the Ministry of Rural Areas and Employment, according to IGNOU Project Director Prof M. Aslam.

The main objective of the programme is empowerment of rural masses through elected functionaries for ensuring their effective participation in the process of self-governance. Multi-media package being prepared includes, self-learning print material, audio-video programmes and contact programmes. The print material is being prepared in most simple language and is extensively illustrated. This has been done keeping in view that even neo-literates can benefit from the materials. Audio-video package is also instructional in nature and is also intended to compensate those who cannot take full advantage of the print material because of prevalent illiteracy.

In the initial stage, the programme is being addressed to the elected members of panchayats in one selected State — Madhya Pradesh. Subsequently, the programme is expected to be extended to other States in the regional languages. The print material is already in the process of being translated into various regional languages.

### **Agile Manufacturing Centre**

The Bangalore University proposes to start an agile manufacturing centre for working professionals in the City, revealed Prof. N R Shetty, Vice-Chancellor. He was speaking at a three-day advanced workshop on "agile manufacturing — integrated product development and process engineering," organised by the Bangalore University and the Council of Scientific and Industrial Research, New Delhi. Prof. Shetty said the professional industries should adopt the advanced technology to emphasise the quality and development of the product for the survival of the industries. These technologies could be introduced with the efforts of an individual and academicians, he added.

Inaugurating the workshop, Mr. B Somashekhar, Higher Education Minister said the participation in this workshop could enrich the knowledge, already acquired by the participants in this field and help them mould the future characters of the companies where they were working. He said the workshop would help the industry to discover its strength and weaknesses and would suggest techniques to overcome the weaknesses to meet the global competitiveness.

### **100 Polytechnics for Delhi**

The Government of Delhi is reported to have decided to set up 100 polytechnic centres in resettlement colonies as well as rural areas of the city in order to provide self employment opportunities to the weaker sections of the society. This was revealed by

the Chief Minister Mr. Sahib Singh Verma while speaking at the inauguration ceremony of the Polytechnic Extension Centre at Nirmal Chaya. The centre is run by Directorate of Social Welfare at Jail Road in West Delhi. He said that the centres would provide training programmes in cycle repair, book binding, scooter repair, typing, embroidery, art painting and plumbing and an interest-free financial assistance of Rs 10,000 would be provided to each trainee in case he/she would like to set up his/her own business.

#### **Pant Award for Dr. Rai**

Dr. L.C. Rai of the Department of Botany, Banaras Hindu University (BHU), has been selected for the Pitamber Pant national environment fellowship award for the year 1996.

Dr. Rai's contributions lie in the areas of environmental biotechnology, heavy metal toxicity in algae, metal removal by algae and aquatic weeds.

The Ministry of Environment and Forests, Government of India, instituted the Pitamber Pant national environment award in the year 1978 in honour of the late Pitamber Pant, a former member of the Planning Commission and the first chairman of the national committee on environmental planning and coordination.

#### **Review Committee for VB University**

Dr. A.R. Kidwai, Governor of Bihar and Chancellor has appointed a three-man Committee (with Dr. K.K. Jha, Principal, Patna Science College, as Convenor and Dr. P.P. Dayal of Ranchi

University and Dr. R.P.S. Rahi of Patna University as members) to review the working of the Vinoba Bhave University, Hazaribagh and suggest measures for its streamlining and effective functioning.

The Committee will look into the functioning of the University, its various Bodies, Faculties, Departments and Colleges and recommend steps covering admissions, teaching schedules, examinations, timely publication of results, its academic calendar etc., with a view to ensuring a minimum of 180 days of teaching and an overall improvement in its academic life.

#### **Courses in Lib & Inf Science**

The Department of Library & Information Science, University of Delhi conducts Post-Graduate courses in Library & Information Science leading to the award of Bachelor of Library Science (B.Lib.Sc.), Master of Library & Information Science (M.L.I.Sc.) and M.Phil degrees.

The last dates to apply for these courses are — B.Lib.Sc. and M.L.I.Sc. (19-7-1996) and M.Phil (12-8-1996). Further details may be had from Prof P.B. Mangla, Head of the Department of Library & Information Science, University of Delhi, Tutorial Building 2nd Floor, Delhi 110007.

### ***News from Agricultural Universities***

#### **New Courses at HAU**

Chaudhary Charan Singh Haryana Agricultural University (CCS HAU) proposes to start four new courses, two each at under-graduate and post-graduate level, from the ensuing academic session. These courses include a BSc (Hons) programme in Botany and Zoology, an MSc course in Food Science and Technology and a Master of Business Administration (MBA) programme with specialisation in agriculture management and marketing.

The Vice-Chancellor, Mr

Dharmvir, revealed that these courses were being introduced in view of 'emergent needs'. He said that in the MSc Food Science and Technology programme, specialisations would be offered in food biochemistry, food microbiology, food and nutrition, food processing and engineering, meat products and dairy technology and fruits and vegetable processing. For the MBA course the proposed intake is ten. He said that a PhD programme in bio-technology would also commence from the next academic session.

### ***News from UGC***

#### **Countrywide Classroom Programme**

Between 8th to 15th July, 1996 the following schedule of telecast on higher education through INSAT-1D under the auspices of the University Grants Commission will be observed. The pro-

gramme is presented in two sets of one hour duration each every day from 6.00 a.m. to 7.00 a.m. and 1.00 p.m. to 2.00 p.m. The programme is available on the TV Network throughout the country.

**Ist Transmission**  
**6.00 a.m. to 7.00 a.m.**

**8.7.96**

"Bookfare - XI"  
"Perspectives on Mountain Tourism: Badrinath Zone-Part I: Tourism Resources"  
"Nature's Child: Adivasi"

**11.7.96**

"Electromagnetic Pollution-Excepts of Interview"  
"Aquatic Fungi"  
"Literature in Society Renaissance: View of Man - Part II"

**13.7.96**

"Interpolation Polynomial - Part II"  
"Mind Problems"  
"Equestrian Sports—Tent Pegging"

**14.7.96**

"The Angel of Hope—Sir Upendra Nath Brahmachari"  
"Living with Health: Parenting"

**Ind Transmission**

**1.00 p.m. to 2.00 p.m.**

**8.7.96**

"The Week Ahead"  
"Trash into Cash"  
"Molecular Biology - Gene Therapy"

**9.7.96**

"Bubbles and their Physics"  
"Interview-Part II"  
"Living with Health-Parenting"

**10.7.96**

"Hands Behind Textile Processing"

"Mahabalipuram: Recent Excavations"  
"The Importance of Animal Pathology"

**11.7.96**

"New Horizons"  
"How Do We Speak - Part II"

**12.7.96**

"Surreal Numbers"  
"Protect Your Creator: Downry"  
"The Chinar"

**13.7.96**

"Lasyakala - Odissi"  
"Collage Theatre"  
"The Art of Gupta Age"

**14.7.96**

No Telecast

**15.7.96**

"The Week Ahead"  
"Question Time"  
"Integrated Pest Management"

**Hindi Telecast**

**प्रातः 6.00 से 6.30 बजे तक**

**8.7.96**

1. "पानी ही जिन्दगानी"  
2. "ईन्धन बचाइये"

**10.7.96**

1. "आलमपुर—समय के प्रवाह में - 11"  
2. "मैं भील हूँ "

**12.7.96**

"हस्त शिल्प-उपासना से उपयोगिता तक"

**15.7.96**

1. "खजूर का तेल,"  
2. "पुष्पित कांटे"

those involved in managing and leading people for achieving results through the use of appropriate behavioural skills.

The program is designed to impart the necessary knowledge and behavioural skills for managing employees effectively.

This course is divided into two modules. Module 1: Interpersonal Skills — This module covers broad domain of (i) Monitoring and Directing Group Effort, (ii) Negotiation and Skills of a Change Agent, and (iii) Leadership & Team Building. Module 2 : Information Processing and Decision Making Skills — The areas covered in this module are Information Management: Monitoring and Dissemination of Information; Decision Making; and Conflict Management and Conflict Resolution.

The last date for receipt of applications is 1st September 1996. Further details may be had from Continuing Education Center, Asian Institute of Technology, G.P.O. Box - 2754, Bangkok 10501 Thailand.

### **Woodrow Wilson Center Fellowships**

The Woodrow Wilson International Center for Scholars, Washington, D. C. (USA) awards approximately 35 fellowships annually in an international competition to individuals with outstanding project proposals representing the entire range of scholarship, with a strong emphasis on the humanities and social sciences. The Center especially wel-

## **News from Abroad**

### **HRD Skills for Managers**

The Continuing Education Centre of the Asian Institute of Technology, Bangkok (Thailand) proposes to organise a Training

Course on HRD Skills for Functional Managers on 16-27 September 1996.

The course is designed for all

comes projects that transcend narrow specialties.

The Centre invites applications for Fellowships in the Humanities and Social Sciences for 1997-98.

Applications from any country are welcome. Men and women with outstanding capabilities and experience from a wide variety of backgrounds (including government, the corporate world, and the professions, as well as academia) are eligible for appointment. For academic participants, eligibility is limited to the postdoctoral level, and normally it is expected that academic candidates will have demonstrated their scholarly development by publication beyond the Ph.D. dissertation. For other applicants, an equivalent degree of professional achievement is expected.

Fellows are associated with one of the Center's seven programs: Asian; East and West European; Historical, Cultural, and Literary Studies; International Studies; Kennan Institute for Advanced Russian Studies; Latin American; and United States Studies.

The Center holds one round of competitive selection per year. The deadline for receipt of applications is October 1, 1996. Decisions on appointment will be made by March 1, 1997.

Further information and application forms may be obtained from : The Fellowships Office, The Woodrow Wilson Center, 1000 Jefferson Drive S.W., S.I. MRC 022, Washington, D.C. 20560.

## ASSOCIATION OF INDIAN UNIVERSITIES

AIU HOUSE, 16, KOTLA MARG, NEW DELHI 110 002

Applications on prescribed form available from this Office on payment of Rs. 5/- (Rs. 10/- if required to be sent by post), are invited from Indian Citizens for the following posts:

### Pay Scale

1. Under Secretary - Four Rs.3000-100-3500-125-4500
2. Section Officer - One Rs.2200-75-2800-EB-100-4000

### Qualifications & Experience

#### Post 1. Under Secretary - Four

**Essential :** High Second Class Master's degree (Min. 55% marks or B+) with five years experience of teaching/research/educational administration.

**Desirable :** Experience in dealing with academic matters in a University/ higher education institution, and knowledge of higher education systems of India and foreign.

OR

Experience of Accounts in educational institutions preferably with CA/ICWA/SAS.

OR

Experience in Publishing; either in editing and production or in marketing.

OR

Experience of Office Management; A LLB Degree.

#### Post 2. Section Officer - One

**Essential :** First or second class Bachelor's degree with three years experience in the scale of Rs. 2000-3500

OR

Five years experience in the scale of 1640-2900

**Desirable :** Knowledge of rules and regulations, establishment matters, office procedure and experience of handling correspondence independently.

A Master's degree.

SC/ST/Ex-Servicemen will be given preference. Appointment on deputation terms may also be considered. Relaxation in the requirements may be made in deserving cases.

The Association reserves the right not to fill up the vacancies advertised. Canvassing in any form by or on behalf of a candidate will be a disqualification. Persons already in service should apply through proper channel.

Applications complete in all respect should reach this office by 31st July, 1996. Applications received after the last date or without complete information may not be entertained.

## BOOK REVIEW

### INSIGHTFUL STUDY

Purushottam A. Patel\*

**S. Narain. Examinations in Ancient India. Delhi, Arya Book Depot, 1993. Pp. xvi+107. Rs. 95.00**

This is an extensive study which throws light on the ancient methods of examination which is an unexplored area. The book seeks to provide an insight into the evolution of examinations in ancient India in the context of the present day ills and problems of the modern examination system. The book refers to various evidences in our scriptures about evaluation system of students. Every *Guru* — The Teacher — adopted his own method and each ancient centre of learning like Nalanda, Takshashila, Vikramshila and Mithila followed its own novel system evaluating the students. It describes that the concept of formal examination came into education field when Panini — the great teacher and grammarian of ancient India graded his students on the basis of the errors made in reciting the text of scriptures.

The basic ideas of ancient system of examination, some of which may be relevant even today, could be kept in view while attempting a scheme of examination reforms and providing a national reorientation to the system. This study, of course, will be of interest to educationists, academicians, researchers and to the students of history who want to share a deeper insight in the subject of education and examination.

The study is divided into IX chapters. The author has tried to

enlist the evils prevailing in our present day modern education and has tried to show how one can find the ideas of curbing these weaknesses through his extensive study of all the scriptures starting from *Vedas*, *Upanishadas*, *Brahmanes*, *Sutras* to all the ancient institutions of learning — the *Vidyapithas*, Epics, all *Ashramas* upto the Buddhist period. The author has provided well selected quotations from all sorts of scriptures as evidence of his theory. He has also studied the education and evaluation methods prevailing in all the ancient *Vidyapithas*.

The author starts his study with the questions "What was the evaluation system in Ancient India? Was there any examination held? Was there any ranking of the students? How were the pupils assessed in terms of their adequacy of knowledge." The answer to these questions is shrouded in obscurity and mystery as the ancient Indian literature does not furnish any direct evidence on this subject. The author has made a thorough and extensive study and by taping bits of evidence some useful inferences have been drawn to conceive the picture of ancient evaluation system.

The author has proved that under the ancient education system teaching, learning and evaluation processes were perfectly integrated. The *Acharya* was the teacher as well as the evaluator and was exercising full supervi-

sion over the students and hence the gap between teaching and learning was minimum. Evaluation of a student was a continuous process as examinations were a daily affair through monitoring. The mental calibre and the qualities of head and heart imbibed by a student together with strict discipline, observing other austerities, were open to the teacher.

The *Samavartan* ceremony was performed when the student completed his study and the teacher was satisfied that the student had gained requisite knowledge. The student was presented to a learned assembly where some questions were put to him to adjudicate the standard of knowledge of the student.

Education in ancient India was characterised by high aims of character building, self-fulfilment and shaping of a distinct personality as *brahmchari*, besides intellectual knowledge of *vedas* and other sciences. Therefore, conducting terminal examination was no answer to evaluate the total attainment of a student.

The author has also brought to light the system of technical and industrial education and the system of practical examination prevailing in technical education during those days in order to evaluate the students. The author has given very rich reference information at all stages. This will help the students in doing qualitative research in the field of ancient Indian education. Some of the quotations presented in this book need to be kept on the walls of the offices of our vice-chancellors and academicians.

This is a well studied and wonderfully prepared piece of qualitative research, which would motivate our students of ancient Indian Education for all times.

\*Gujarat Vidyapith, Ahmedabad-380014

# RESEARCH IN PROGRESS

## A list of research scholars registered for doctoral degrees in Indian Universities

### PHYSICAL SCIENCES

#### Physics

1. Antony, C.J. Vibrational spectroscopic studies in crystals of certain double sulphates. Kerala. Dr S Devanarayanan, Prof and Head, Department of Physics, University of Kerala, Kariavattom.
2. Ashwani Kumar. Study of thermodynamic and transport properties of cerium based systems in the presence of CET and magnetic field. HP. Dr K C Sharma, Department of Physics, Himachal Pradesh University, Shimla.
3. Augustine, Manju. An investigation of tropical atmosphere. Kerala. Dr S Devanarayanan, Prof and Head, Department of Physics, University of Kerala, Kariavattom.
4. Attri, Kartar Singh. Concentration fluctuations in binary liquid metal alloys : Correlation functions and compound formation. HP. Dr P K Ahluwalia, Department of Physics, Himachal Pradesh University, Shimla.
5. Guleria, Ravinder. Study of electronic properties of chemisorbed metal surfaces : Model Hamiltonian scheme. HP. Dr P K Ahluwalia, Department of Physics, Himachal Pradesh University, Shimla.
6. Jayakumar, K. Spectroscopic studies of crystals. Kerala. Dr V Unnikrishnan Nayar, Prof and Head, Department of Optoelectronics, University of Kerala, Kariavattom.
7. Pradeep Kumar, V. Mossbauer studies of some ferrites and ceramics. Kerala. Dr N Vasudevan Nair, Department of Physics, M G College, Thiruvananthapuram.
8. Rajinder Kumar. Density and spin-density correlation functions of two dimensional quantum electron fluids. HP. Dr P K Ahluwalia, Department of Physics, Himachal Pradesh University, Shimla.
9. Stelle, M. Mary Preparation and characterization of some technologically important films. Kerala. Dr V K Vaidyan, Prof, Department of Physics, University of Kerala, Kariavattom.
10. Thambi Raja, S. Abraham. Thermal wave in soil-air interface. Kerala. Dr G Renuka, Department of Physics, University of Kerala, Kariavattom.

#### Chemistry

1. Naeem, A. Studies on some transition metal complexes. Kerala. Dr P Indrasenan, Prof, Department of Chemistry, University of Kerala, Kariavattom.
2. Shanavas, S. Studies on Harkin-Jura theory for the adsorption of solute mixtures from solution by solids. Kerala. Dr A Salahudeen Kunju, Department of Chemistry, University of Kerala, Thiruvananthapuram.

### BIOLOGICAL SCIENCES

#### Biochemistry

1. Priya, P C. Evaluation of genomic instability in breast

cancer. Kerala. Dr B Prabha, Assoc. Prof, Regional Cancer Centre, Thiruvananthapuram and Dr N R Vijayalakshmi, Reader, Department of Biochemistry, University of Kerala, Kariavattom.

#### Biotechnology

1. Yadav, Neelesh. Studies on some oil producing fungi with special reference to fatty acids of pharmaceutical importance. H S Gour. Dr P C Jain and Prof S C Agrawal, Department of Applied Microbiology and Biotechnology, Dr Harisingh Gour Vishwavidyalaya, Sagar.

#### Botany

1. Singh, Asha. Comparative distribution of active ectoparasites in two forests of Shimla, Himachal Pradesh. Dr T N Lakhanpal, Department of Biosciences, Himachal Pradesh University, Shimla.

2. Suma, T B. Somatic variations in some solanaceous members : Use of isozyme and RAPD markers for identifying useful variants. Kerala. Dr G M Nair, Department of Botany, University of Kerala, Kariavattom.

#### Zoology

1. Jayaprakash, M. A study on certain ecobehavioural aspects of the land tortoise, *Testudo* sp. Kerala. Dr K M Alexander, Department of Zoology, M G College, Thiruvananthapuram.

2. Sajeeva Kumar, D. Studies on some aspects of ethology of certain apodans. Kerala. Dr K M Alexander, Department of Zoology, M G College, Thiruvananthapuram.

## Concept: A FIRST HAND EXPERIENCE

### AGRICULTURAL AND RURAL RECONSTRUCTION A Sustainable Approach

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**INSTITUTE OF BUSINESS MANAGEMENT  
NATIONAL COUNCIL OF EDUCATION, BENGAL  
CALCUTTA-700 032**

**ADMISSION NOTICE**

**MASTER OF BUSINESS ADMINISTRATION (M.B.A.)  
DEGREE COURSE OF JADAVPUR UNIVERSITY**

Applications are invited for admission to the 13th batch (Session 1997-98) of the Three-Year (Evening) MBA Degree Course of Jadavpur University conducted by the Institute of Business Management, N.C.E., Bengal, Jadavpur. Classes will commence from January 1997.

**Eligibility . Minimum academic qualification :**

An Honours Degree in any discipline of a recognised University

Or

A Master or Bachelor (General/Pass) Degree in any discipline of recognised University with 50% marks in the aggregate.

**Note :** No other Professional qualification except Degree of a recognised University will fulfil the minimum eligibility requirement.

Admission to the course will be made on the basis of Written test, Interview and previous academic records.

**Normal Intake - 60 (including a few deputed candidates).**

**For General Candidates :**

Application Form with Prospectus can be obtained from the Office of the Director, Institute of Business Management, P.O. Jadavpur University, Calcutta-700 032 between 4.00 P.M. and 7.00 P.M. on all working days from Monday 1st July, 1996 to Saturday 10th August, 1996 on payment of Rs. 200/- in cash/Draft.

**For Deputed Candidates:**

Organisations sponsoring candidates must apply in writing to the Director for issue of Prescribed Application Forms on payment of Rs. 200/- each.

Forms can also be obtained by post on payment of Rs. 200/- in Crossed Bank Draft payable to "N.C.E., Bengal, A/c. I.B.M." at Calcutta and the request should be accompanied by postage stamp of Rs. 8/- only.

Last date for receipt of completed application form with prescribed registration fee : Monday 12th August, 1996

Written Test will be held in Calcutta on Sunday, the 25th August, 1996.

**AMERICAN STUDIES RESEARCH CENTRE  
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With a view to enhance the study of international relations in India, the ASRC and the host universities are organising several Workshops for Research Guides. They are designed to provide an opportunity for those guiding research leading to M.Phil and Ph.D. degrees in the field of international relations (broadly defined) to exchange ideas on research (methods, topics, guidance, source materials, writing, etc.), discuss procedures and regulations for registration, and also for updating their acquaintance with recent research trends and published work in the field.

**• VENUES:** Baroda (September), New Delhi (October), and Udaipur (November), Manipur (November) and Pondicherry (December) 1996

**• DURATION :** Two Days

**DATES:** To be fixed

**• NUMBER OF PARTICIPANTS :** Usually 25 to 30 research guides are invited

**• ELIGIBILITY:** Recognised research guides who have guided/registered at least two M.Phil/Ph.D. scholars under their supervision are eligible to apply. Proximity to the venue concerned will be the criterion for placement of the selected participants.

**• DEADLINE:** Last date for receipt of letters of interest is one month prior to the scheduled month of the workshop concerned.

**• ACCOMMODATION:** Selected outstation participants will stay and take their meals in the hostel/guest house of the host university.

**• TRAVEL EXPENSES:** Round trip train fare by first class/A.C. sleeper will be reimbursed. The relevant ticket is needed for reimbursement. Rs. 100/- per 24 hours of travel time is paid to cover local transport and other incidental charges.

If interested, please send your latest C.V. along with the titles of the dissertations completed under your supervision, the year(s) of the award of M.Phil./Ph.D. degrees and a list of scholars currently working with you, along with their topics of research and dates of registration. Send your letters to :

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E-mail: babu@asrc.hyderabad.net.in

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**  
**Indira Gandhi Sports Complex**  
**I.P. Estate, New Delhi - 110 002**

**Schedule of Programmes during 1996-97**

The AICTE has identified Institutions to conduct subject oriented refresher programmes in Engg. & Tech. and Induction Training Programmes in Engg. & Tech., Pharmacy, Management, Architecture and Polytechnics during 1996-97 for the in service teachers, working in AICTE approved institutions. Teachers selected for the courses are to be treated as on duty with full pay and allowances by the sponsoring institution.

The host institution shall provide lodging and boarding to outstation participants and TA will be paid to them as per rules. In case any institution is unable to make lodging and boarding arrangements, DA will be paid in cash to the participants.

**Refresher Programmes during 1996-97**

The schedule of refresher courses during 1996-97 is given below :-

S No	Title of the Programme	Coordinator's Name & Venue of the Programme	Duration & Dates
1	Appls of Finite Elements in Non-Linear Problems of Civil Engg	Prof. H.S. Mehta, Shri. G.S. Inst of Tech. & Sc Indore - 452003	2 WEEKS - OCT. 7-19, 96
2	Use of Mgt Techniques in Engg.	Prof. M.C. Gupta (Civil), Madhav Inst. of Tech. & Sci. Gwalior - 474 005	2 WEEKS
3	The City Environment	Prof. Y.P. Singh, Madhav Inst of Tech. & Sci. Gwalior - 474005	2 WEEKS
4	Adaptive Filtering Techniques and Applications	Dr B. Prabhakara Rao, JNTU College Kakinada - 533033.	1 WEEK - OCT 14 - OCT 20, 96
5	Alternate Fuels and Energy Management	Prof. D.N. Reddy, Univ. of Engg. & Tech. Hyderabad -500 007	2 WEEKS - JULY 17-29, 96
6	Biomedical Instrumentation	Amitabh Sharma, Engg College, Kota-324 010	2 WEEKS - OCT. 96
7	New Trends in Refrigeration	Dr. M. Prasad, Indian Inst of Tech. Kanpur - 208016	2 WEEKS - JULY 17-29, 96
8	Advanced Data Processing Techniques in Remote Sensing	Dr. N. Tripathi, Indian Inst. of Tech. Kanpur - 208016	2 WEEKS - JULY 1-13, 96
9	Microwave Remote Sensing and its Applications	Dr. R.P. Singh, Indian Inst. of Tech. Kanpur - 208016	2 WEEKS - JULY 1-13, 96
10	Developments in Concrete Constructions	Dr. Sudhir Misra, Indian Inst. of Tech Kanpur - 208016	1 WEEK - DEC. 2-7, 96
11	Production Mgt for Productivity and Profits	Dr. R.R.K. Sharma, Indian Inst. of Tech. Kanpur - 208016	1 WEEK - DEC. 6-13, 96
12	Lasers and Applications	Dr. Bansil Lal, Indian Inst. of Tech. Kanpur - 208016	2 WEEKS - DEC. 9-21, 96
13	Bearing Design and Analysis	Prof. S. Biswas, Indian Inst. of Tech New Delhi - 110016.	1 WEEK - DEC. 8-14, 96
14	Advanced Engineering Materials and their Applications	Prof. R.K. Pandey, Indian Inst. of Tech. New Delhi - 110016.	2 WEEKS - DEC 9-20, 96
15	Topics in Suramolecular Science & Tech.	Dr. M. Pant, Indian Inst. of Tech. New Delhi - 110016.	2 WEEKS - DEC. 8-22, 96
16	Remote Sensing for Land and Water Resources Mgt.	Dr. K.N. Tewari, Indian Inst. of Tech. Kharagpur - 721302.	2 WEEKS - DEC. 16-28, 96
17	Entrepreneurship Development	Prof. B.S. Patro, Orissa Univ. of Agri. & Tech. Bhubaneswar - 751003.	2 WEEKS - AUG. 12-24, 96
18	Non-Conventional Machining	Prof. P.K. Misra, Indian Inst. of Tech. Kharagpur - 721302	2 WEEKS - JAN. 6-19, 97
19	Energy Audit and management	Dr. N. Saha, Regional Engg. College Durgapur - 713209.	2 WEEKS - DEC 9-21, 96
20	Biomedical Instrumentation	Dr. R.S. Anand, Indian Inst. Of Tech. Kharagpur - 721302	2 WEEKS - SEPT. 2-13, 96
21	Application of State of Art Control Theories in Drives	Dr. Nidhi Mahar, Univ. College of Engg. Burla - 768016.	1 WEEK - AUG. 19-24, 96
22	Highrise Structure	Dr. S.K. Bhattacharya, Indian Inst. of Tech. Kharagpur - 721302.	2 WEEKS - DEC. 23, 96-JAN. 3, 97
23	Advances in Water Pollution Control	Dr. R. Choudhury (Chem.), Assam Engg. College Guwahati - 781013	2 WEEKS - DEC. 16-28, 96
24	Metallurgy Control in Welding	Prof. A.K. Chakrabarty, Indian Inst. of Tech. Kharagpur - 721302.	2 WEEKS - NOV. 18-29, 96

25	Artificial Intelligence and Neural Network	Prof. D Mukhopadhyay, Jadavpur University Calcutta - 700032.	2 WEEKS - DEC. 9-21, 96
26	Project Management and Quality in Construction	Sri. R.S. Ranade, Shri Bhagubhai Mafet. Poly. Mumbai - 400056	2 WEEKS - JULY, 96
27	Finite Element Analysis of Floating Structures	Dr Anil Kumar, Prof. H.N. Acharya, Indian Institute of Tech. Kanpur - 208016.	1 WEEK - DEC 16-22, 1996
28	Fracture Mechanics of Plain and Reinforced Concrete	Prof B K Raghuprasad, Indian Institute of Sci. Bangalore - 560012.	1 WEEK - SEPT 9-14, 1996
29	CAD/CAM/Rapid Prototyping for Near net Shape Manufacturing Application to Tool Design & Fabrication- Patterns & Dies for Metal Casting & Metal Forming	Prof M.N. Srinivasan, Prof S. Shekhar & Prof. B Gurumurthy Indian Institute of Sci. Bangalore - 560012.	1 WEEK - JULY 8-12, 1996
30	Sutra-Sustainable Transformation of Rural Areas.	Dr. H.N. Chanakya, Mr. P. Rajababaiah & Prof. B.T. Niyaguna Indian Institute of Science Bangalore - 560 012	1 WEEK
31	Embedded Controllers and Applications	Mr S. Ramagopal & Mr C. Nagaraja Murthy Indian Institute of Science Bangalore - 560012.	2 WEEKS - OCTOBER 7-19, 96
32	Environmental Geotechnic	Dr P V. Sivapullaiah, Indian Institute of Science Bangalore - 560012.	2 WEEKS - OCTOBER 7-19, 96

#### Induction Training Programmes during 1996-97

The Schedule of Induction Training Programmes during 1996-97 is given below :-

#### ARCHITECTURE

S No	Institution/ Univ /College	Proposed dates for the programme	Coordinator/ Principal	Venue
1	VREC, Nagpur	Dec. 2-21, 96	Prof. B.P. Guro Head E.E.D	Dept. of Engg. & Arch VREC, Nagpur
2	Anna Univ. Madras	Dec. 2-20, 96	Mrs. Rance Vedamuthu	Anna Univ., Madras

#### ENGG. AND TECH

Sl No	Academic Staff College/Univ	Proposed Dates for the Prog	Coordinator/ Principal	Venue
1.	Aligarh Muslim Univ Aligarh	15 July-4 Aug., 96	To be Identified	Academic Staff College Aligarh Muslim Univ
2	Bharathiar Univ Coimbatore	22 July 96 onwards	Dr I' Radhakrishnan	PSC College of Tech Coimbatore - 641004
3	Devi Ahilya Vishwavidyalaya Indore	23 Sep 96 onwards Sep. 16-Oct 5, 96 Jan 6-25, 97	To be Identified	Academic Staff College Indore
4	Gujarat Univ. Ahmedabad	July 8-Aug. 3, 96	To be Identified	L.D. College of Engg. Ahmedabad
5	Hamachal Pradesh University Shimla	16 Dec., 96-1 Jan, 97	To be Identified	REC Hamirpur
6	Karnatak Univ Dharwad	July 11-31, 96	To be Identified	Academic Staff College Karnatak Univ Dharwad
7	Kurukshetra Univ Kurukshetra	15 July-2 Aug. 96	Ele Engg. Dept.	REC Kurukshetra
8	Lucknow Univ. Lucknow	Schedule awaited	To be Identified	To be Identified
9	Univ. of Madras Madras	Jul 10-31, 96	Prof S Ekambaram	To be Identified
10.	Univ. of Mysore Mysore	Sep 2-21, 96	To be Identified	To be Identified
11	Unit of Bombay Mumbai	Schedule awaited	To be Identified	To be Identified
12	Univ of Calicut Calicut	Schedule awaited	To be Identified	To be Identified
13	Gauhati Univ Guwahati	July/Aug. 96	To be Identified	To be Identified
14	Osmania Univ Hyderabad	Schedule awaited	To be Identified	To be Identified
15.	Univ of Rajasthan Jaipur	Schedule awaited	To be Identified	To be Identified
16	Utkal Univ Bhubaneswar	Schedule awaited	To be Identified	To be Identified
17	Gorakhpur Univ Gorakhpur	18 Aug. 96 onwards	To be Identified	Academic Staff College Gorakhpur Univ. Gorakhpur
18.	Bharathidasan Univ Trichy	4-24, July, 1996	To be Identified	Academic Staff College Bharathidasan Univ., Trichy

#### MANAGEMENT

S No.	Institution/Univ. / College	Proposed dates for the programme	Coordinator/Principal	Venue
1	Panjab Univ. Chandigarh	Jun 12-Jul 2, 96 Nov 6-26 1996	Dr S.P. Singh	Univ. Bus. School Chandigarh
2.	Delhi University	30 Sept.-19 Oct. 96 20 Dec. 96-9 Jan., 97	Dr. S.P. Gupta Dr. O.P. Chopra	Faculty of Mgt. Studies Univ. of Delhi
3	Narsee Monji Inst. of Mgt., Mumbai	July 15-Aug. 3, 96	Dr Y.K. Bhushan	Narsee Monji Inst Mumbai
4.	Univ. of Mysore	September, 96	Prof. M Venkatesh	Dept. of Studies in Management Science

**PHARMACY**

Sl. No.	Institution/Univ/College	Proposed Dates for the Prog.	Coordinator/Principal	Venue
1.	J.S.S. College of Pharmacy Mysore	4-23 Nov., 96	Dr. B.G. Naqvi	JSS Coll. of Pharmacy Mysore
2.	Kakatiya Univ. Warangal	Schedule awaited	Prof. Bir Bahadur	Kakatiya Univ. Warangal

**POLYTECHNICS**

Sl. No.	Coordinator & Venue	Proposed Dates for the Programmes
1	TTTI Bhopal Pune TTTI (TTTI Bhopal Extension Centre)	1-19 July, 1996 9-27 Sept., 1996
2	Dr B G Barki Dr B G Barki Dr R Srinivasan Dr B G. Barki Dr B. Mukhopadhyay TTTI Madras	8-26 July, 1996 16 Sept. 10 Oct., 1996 2-27 Sept., 1996 2-27 Dec., 1996 6-24 Jan., 1997
3	Prof B M. Dhur TTTI Sector 26, Chandigarh-160019.	8-26 July, 1996 19-30, Augt., 1996 6-24, January, 1997 10-28 February, 1997
4	Dr B.C Das Prof D P Bhattacharya TTTI Calcutta - 700091	1-26 July, 1996 Schedule Awaited for 3 programmes

Selection of teachers for participation in these courses will be done by the concerned Institution.

For further details please contact the Coordinator or Head of the institution



## भारतीय विदेश व्यापार संस्थान INDIAN INSTITUTE OF FOREIGN TRADE

### POST-GRADUATE DIPLOMA PROGRAMME IN INTERNATIONAL TRADE OCT 7, 1996 - APRIL 4, 1997

**OBJECTIVE :** Aims at developing the managerial skills of young executives engaged in or likely to be groomed in International business by imparting a systematic knowledge of marketing management concepts as well as operational aspects of international trade in a global and highly dynamic environment.

**FOR WHOM INTENDED :** Working executives in private/public sector undertakings engaged or likely to be engaged in International business.

**ELIGIBILITY :** (a) Company Sponsorship, (b) A Recognised University Degree in any discipline with background in Mathematics at the Senior Secondary level, and (c) Minimum three-year executive level work experience as on 22nd July, 1996.

The Programme is also open to NRINRI-Sponsored Candidates (Details in Information Brochure)

**AGE :** Preferably below 35 years.

**SELECTION :** There are 50 seats, selection to which will be made on the basis of interviews to be held in Delhi starting from August 26, 1996. Candidates will appear in the interview at their own expense. Seats reserved for SC/ST candidates as per Govt. Rules.

**VENUE/TIMING :** IIFT Campus, 9 am to 5.30 pm (Monday to Friday).

**HOSTEL ACCOMMODATION :** Not likely to be available

**HOW TO APPLY :** Typed application for admission to the Programme may be made on paper, measuring 30 cms x 21 cms., with the following information . 1. Name in full (in capital letters), 2. Date of Birth, 3. Mailing Address, 4. Whether belonging to SC/ST (if yes, attach certificate), 5. Programme applied for : PGDP (96-97), 6. Educational Qualifications (attach documentary evidence), 7. Work Experience with dates (attach documentary evidence), 8. Attach Sponsorship letter, 9. Details of Demand Draft, 10. Signature.

**NRI/NRI-Sponsored Candidates applying for the Programme are also to furnish the following additional information :**

1. Nationality, 2. Proof of GMAT Score (if not residing in India).

Candidates must also submit alongwith the Application a justification in about 300 words for seeking admission to the Programme.

The LAST DATE for receipt of Applications, alongwith a photograph pasted, a SEI.F-ADDRESSED ONE RUPEE POSTAL ENVELOPE and a crossed Demand Draft of Rs. 500/- (Five Hundred only) drawn on a nationalised bank in Delhi in favour of Indian Institute of Foreign Trade, is 22nd July, 1996 at INDIAN INSTITUTE OF FOREIGN TRADE, IIFT Bhawan, Qutab Institutional Area, New Delhi-110016.

On receipt of above application, the Programme Brochure will be mailed.

Ph : 6865124, 6857908 Fax : 091-11-6859520, 6853956, Grams : INDIIFT Tlx : 031-73185 IIFT IN

DEAN (FOUNDATION PROGRAMMES)

IIFT - Where excellence is a way of life

## CLASSIFIED ADVERTISEMENTS

### GURUKULA KANGRI VISHWAVIDYALAYA HARDWAR-249404

Applications are invited on or before 31 July, 1996, in prescribed form containing detailed information and terms and conditions available from the office of the Registrar, Gurukula Kangri Vishwavidyalaya, Hardwar against the payment of Rs. 50/- in cash or Bank Draft payable at Hardwar in favour of Registrar.

Qualifications and Pay Scales as per UGC rules.

1. Main campus :- Male Professor in Vedic Literature, Psychology, and Computer Science. Male Readers in Maths (two), Botany, and Linguistics (Hindi, English, Sanskrit). Male Lecturers in Ancient Indian History Culture and Archaeology (two), Philosophy, Hindi, English and Zoology, Deputy Registrar, Instructor in Yoga and Junior Engineer, System Manager in Computer Centre (leave vacancy). Lecturers in Computer Science, Economics, Political Science, Maths on temporary/part time/contract basis.
2. Kanya Gurukula Mahavidyalaya, 47 Sewak Ashram Road, Dehradun - Female Principal in Reader's Scale (English, Hindi, Sanskrit, A.I.H. Culture & Archaeology). Female Lecturers in Ancient Indian History Culture & Archaeology, Computer Science (temporary) and Hostel warden.
3. Kanya Gurukula Mahavidyalaya, Satikund, Kankhal, Hardwar. - Female Candidates for the post of Lecturers in Sanskrit, Hindi, Philosophy, Ancient Indian History Culture & Archaeology, English, Psychology, Maths., Physics, Chemistry, Microbiology and Environmental Science on Temporary/part time/contract basis.

#### NOTE:-

1. Persons who have already applied need not apply again.
2. The candidates should send a duly stamped and self addressed envelope of 9"x4".

Dr. Jaidev Vedalankar  
REGISTRAR

### ST. MARY'S COLLEGE, MANARCAUD MALAM P.O., KOTTAYAM - 686031

#### WANTED

1. Junior lecturer in English for Pre-degree — Post One (Open merit)
2. Junior lecturer (Part time) in Mathematics for Pre-degree — Post One (Open merit)
3. Junior lecturer in Commerce for Pre-degree — Post one (Open merit)

Qualification : 1. Masters Degree in the concerned subject with atleast 50% marks or its equivalent. 2. B.Ed Degree

Age : Should have completed 22 years and should not be above 35 years as on 1st Jan, 1996.

Scale of Pay : Rs. 2060 - 3200

Those who have appeared for the examination may also apply but they will be interviewed only if they produce the certificate and mark list at the time of interview.

Apply within one month from the date of this notification. Those who have already applied need not apply again. Application form and other details can be had from the undersigned on payment of Rs. 100/- by M.O. Rs. 110/-.

#### PRINCIPAL

### C.M.S. COLLEGE, KOTTAYAM

Applications are invited for appointment as Lecturer in the vacancies likely to arise during the academic year 1996-97.

#### Junior Lecturer Pre-Degree

1. Hindi - 1 Open
2. Economics - 1 Open
3. Physics - 3 Open/Community
4. Botany - 1 Community

#### Lecturer Degree

Home Science - 1 Community

Age & Qualifications :- As prescribed by M.G. University and Govt. of Kerala. B.Ed Degree is essential for item Nos 1-4. Apply within one month from the date of publication of this notification. Application forms are available from the college office on payment of Rs. 100/- (Rs. 110/- by M.O.).

#### PRINCIPAL

### MORNING STAR HOME SCIENCE COLLEGE, ANGAMALY - 683 573 Kerala State

#### WANTED

(Subject to sanction and approval of the University)

1. Lecturer in Home Science - U.G.C. Scheme - Substantive vacancy - 1 (Open)
2. Jr. Lecturers - Pre-degree category Botany -1 (Community-Roman catholic); Chemistry -1 (Community) Physics -1 (Open); Zoology -1 (Open) English -1 (Open - anticipated leave vacancy)

#### QUALIFICATION

1. U.G.C. Scheme - Masters degree in Home Science with not less than 55% of marks and a pass in the UGC Lecturership examination or other equivalent qualification prescribed by UGC/University.
2. Pre-degree category - Masters degree in the concerned subject with not less than 50% of marks and B.Ed. degree. Those who are appointed in the Pre-Degree category will have no claim for UGC Scheme posts and will have to teach in the Pre-degree level with state scale of pay, and are bound to furnish such an undertaking.

Age: As per Govt./University rules.

Application forms can be had from the Office on payment of Rs. 100/- (Rs. 110/- by post) and should be submitted to the undersigned within 30 days from the date of this notification. The candidates already applied as per the earlier notification need not apply again.

#### PRINCIPAL

### ST. PETER'S COLLEGE, KOLENCHERY

#### WANTED

Applications are invited from qualified candidates for the appointment as Junior Lecturers in Mathematics (1 temporary vacancy) and English (2 temporary vacancy) under Community/Merit quota.

Qualifications: II Class M.A./M.Sc. degree with 50% marks and B.Ed.

Age: Between 18 and 36 years as on 1.7.1996.

Those who are appointed will have no claim for appointment under UGC scheme vacancies and will have to teach in Pre-degree classes. Apply within one month with true copies of certificates and marklists proving date of birth & qualifications from graduate level onwards. Cost of application form - Rs. 100/- (by M.O. Rs. 107/-).

**PRINCIPAL**  
**N.S.S. COLLEGES' CENTRAL COMMITTEE, PERUNNAI, P.O., Changancherry-2, Kerala.**

**WANTED**

Lecturers in the following subjects for N.S.S. Colleges under Mahatma Gandhi University, Kerala State.

1. Botany	2. Zoology
3. Economics	4. Electronics
5. Computer Application.	

**Qualification :** As prescribed in the Mahatma Gandhi University Regulations.

**Age :** As applicable for direct recruitment in Government Colleges.

Application forms can be had from the office of "The Chief Accounts and Audit Officer, N.S.S. Head Office, Perunnai, Changancherry-2, Kerala" on payment of Rs 50/- in cash or Rs. 52/- by money order if required by post. Application duly filled up should reach the undersigned within one month from the date of publication of this notification.

Fifty per cent of the vacancies will be filled up from among the candidates belonging to Nair Community.

**SECRETARY**

**INDIAN INSTITUTE OF GEOMAGNETISM**  
Dr. Nanabhai Moos Marg, Colaba,  
Bombay-400 005  
Corrigendum

Page 34, 24.6.1996 issue of University News  
Advt. No. 5/96

Item '(2) Technical Officer-I requirements may be read as below:

(i) First or High Second Class M.Sc. in Physics, etc. and two years experience in the relevant field in a reputed University/Laboratory/Institute.

**INDIAN INSTITUTE OF MASS COMMUNICATION  
NEW DELHI**

Applications in the prescribed form are invited for the following posts for Institute's Branch at Dhenkanal (Orissa).

1. Professor (Pay scale : Rs. 4500-7300)
2. Associate Professor (Pay scale : Rs. 3700-5300)
3. Assistant Professor (Pay scale : Rs. 2200-4000)

**Age (as on 31.12.1996)**

Normally below 55 years for Professor, below 45 years for Associate Professor and below 40 years for Assistant Professor. Relaxable upto 5 years in the case of SC/ST and 3 years in the case of OBC candidates.

Application forms and the full advertisement can be obtained from Deputy Registrar, Indian Institute of Mass Communication, Aruna Asaf Ali Marg, JNU New Campus, New Delhi-110067 in person or by post by sending a self-addressed stamped (Rs. 2.00) envelope (27x13 cms.). Completed application form should be accompanied by a Demand Draft for Rs 20/- in favour of INDIAN INSTITUTE OF MASS COMMUNICATION, NEW DELHI.

Last date for issue of application form is 14.8.1996 and receipt of completed application is 21.8.1996.

**WHILE THE INSTITUTE WILL TAKE EVERY CARE AND CAUTION IN SENDING COMMUNICATION, IT DOES NOT TAKE ANY RESPONSIBILITY FOR POSTAL LAPSES OR DELAY.**

**Zantye Brothers Educational Foundation's**

**NARAYAN ZANTYE COLLEGE OF COMMERCE**

**Bicholim - Goa - 403 504**

Invites applications from Indian Citizens for the following posts:

1. Lecturer in English - 1 post full time
2. Lecturer in Economics - 1 post full time
3. Lecturer in Maths & Statistics - 1 post full time
4. Lecturers in Business Management - 2 posts full time
5. Lecturer in Cost and Management Accounting - 1 post full time (Reserved for SC/ST)
6. Lecturer in Geography - 1 post part time (Reserved for SC/ST)
7. Lecturer in Computer Awareness - 1 post part time
8. Lecturer in Business Law - 1 post lecture basis
9. Librarian
10. College Director of Physical Education and Sports

1. Posts under serial No. 5 and 6 are reserved for Scheduled Castes/Tribes. If no suitable candidates are available from above mentioned categories, candidates from general category shall be considered for appointment Temporarily for one year.

2. Academic Qualifications:

A) For Lecturers' Posts

(i) Master's Degree in the relevant subject (i.e. minimum 6 papers with at least 55% marks or its equivalent grade and (ii) good academic record

**GOKHALE INSTITUTE OF POLITICS AND ECONOMICS**

(Deemed to be a University)

**PUNE - 411 004.**

Applications are invited for the following posts, in the U.G.C. pay-scales, to reach the undersigned on or before 31st of July, 1996.

**Professors : 7 (SC - 1, ST - 1, DT - 1, Open - 4)**

**Readers : 9 (SC - 1, ST - 1, DT - 1, NT - 1, Open - 5)**

**Lecturers : 7 (SC - 1, ST - 1, DT - 1, Open 4)**

**Documentation Officers : 2 (SC - 1, Open 1)**

(in Lecturer's grade)

**Junior Research Fellowships : 11**

**Desirable Areas of Specialisation : Micro Economics, Public Finance, Finance, International Economics, Agricultural Economics, Industrial Economics, Labour Economics, Urban Economics, Population Studies, Planning and Development, Applied Statistics, Econometrics, Economic History, Economics of East European Countries, Other areas of Economics and Rural Sociology.**

Prescribed application form and information regarding prescribed minimum qualifications and other particulars can be obtained from the Registrar of the Institute by sending an Account Payee Demand Draft of Rs. 50/- drawn on any bank in Pune and payable to the Gokhale Institute of Politics and Economics, together with a self-addressed envelope bearing postal stamp of three rupees.

**D. C. Wadhwa  
Director**

(i.e. at least 50% at the Graduation examination with subject applied for or an average of 50% marks at the Three examinations i.e. SSC, HSSC and Graduation taken together) For Post under No. 7 only (a) M.E/M. Tech in Computer Science or Electronics with 55% marks and good academic record or (b) MCA or M.Sc. in Computer Science or Electronics with 55% marks and good academic record or (c) M.Sc (Statistics or Mathematics) with 55% marks and good academic record with exposure to Computer Science.

**B) For Librarian**

(i) Master's degree in Library Science/Information Science/Documentation or an equivalent professional degree with at least 55% marks or its equivalent grade plus a consistently good academic record or Masters degree in Arts/Science/Commerce or equivalent degree with at least 55% marks or its equivalent grade with Bachelor's degree in Library Science/Information Science/Documentation or an equivalent professional degree with at least 55% marks or its equivalent grade plus a consistently good academic record.

**C) For College Director of Physical Education and Sports.**

(i) Master's Degree in Physical Education (2 years course) or Master's Degree in Sports (2 years course) of NS, NIS, Patiala with at least 55% marks or its equivalent grade plus a consistently good academic record.

(ii) Record of having represented the university/College at the Inter University/Inter-Collegiate Competitions or the State in National Championship.

3. The candidates for posts of Lecturers/ Librarian/College D.P.E.S. must have passed the National Eligibility Test conducted by UGC/CSIR or similar Tests accredited by UGC. In case candidates having passed NET are not available or found unsuitable otherwise, other suitable candidates would be appointed on purely temporary basis.

4. Scale of pay (For Lecturers, Librarian College Director of Physical Education and Sports.):

Rs. 2200-75-2800-100-4000 plus admissible allowances. For the part time

post the scales of pay will be the half of that of the Full Time post mentioned above.

5. Service conditions : As prescribed by Goa University, Director of Education, Govt of Goa and other Competent Authorities. Persons who are employed shall send their applications through proper channel. Break in service, if any, should be accounted for.
6. Applications from the reserved categories should attach a certified copy of caste certificate.
7. Interested candidates should apply giving full details, viz. Full name, Address, Date of Birth, Percentage of marks from SSC onwards, Subjects offered at all public exams, teaching experience, if any, and any other details.
8. True copies of marks statements of all public examinations passed, should be enclosed.
9. Applications complete in all respects should reach the Principal within 15 days from the date of publication of this advertisement, clearly mentioning the Sr. No. of the post applied for.
10. Posts will be filled provided work load warrants.

Arun Sakhardande  
PRINCIPAL

**VISHWAKARMA INSTITUTE  
OF TECHNOLOGY,  
666 UPPER INDIRANAGAR,  
BIBWEWADI,  
PUNE - 411037**

Affiliated to University of Pune and Approved by A.I.C.T.E., New Delhi.

**Post Graduate Course Vacancies**

Applications are invited on plain paper with full bio-data and copies of testimonials for the following posts.

1. Professor of Mechanical Engineering
2. Asstt. Professor of Mech. Engineering

— One post each from Open category.

**Qualifications and Pay Scales :**

- i) Candidates with basic Mechanical Engineering degree and specialisation at Postgraduate level in I.C. Engines/Refrigeration and Air-conditioning/ Thermal Engineering/ Automobile Engineering need only apply.

And

- ii) As per A.I.C.T.E./Pune University norms. However candidates with Ph.D. degree and experience in teaching at Postgraduate level are preferable.

Apply to the Principal before 15/7/1996.

H.K. Abhyankar  
PRINCIPAL

**Concept**

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The book enumerates the emergence of computer hardware and software right from its inception and maps out the growth and progress of computer education in India as an accumulated effort of many institutions. The book would be of immense value to everyone with interest in computer education in India and other developing countries.

Dr. Utpal K. Banerjee is a highly successful advisor and consultant in information technology with several large public and private bodies.

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# MADURAI KAMARAJ UNIVERSITY

## DIRECTORATE OF DISTANCE EDUCATION

### ADMISSION NOTIFICATION

#### ADMISSION TO M.B.A. (DISTANCE LEARNING PROGRAMME)

The Directorate of Distance Education, Madurai Kamaraj University, proudly announces its fourth programme of MBA through distance learning.

Applications are invited from working executives, employees, Entrepreneurs and young graduates for admission to MBA (Distance Learning Programme) for the Academic Year 1996-97

This 3 year Programme comprises of a sound knowledge on foundations of management and functional areas of management. Besides, the participant would be independently working on a project work applying the concepts of management

#### ELIGIBILITY :

- A) Candidates for admission to the Master of Business Administration Course under Distance Learning Programme should possess a Bachelor's degree in any subject from this University or any other University recognised as equivalent thereto with three years post qualification work experience in a business firm or organisation
  - or
- B) Should possess a Bachelor's degree of this University or any other University accepted as equivalent thereto, with a minimum aggregate of 50% marks in Humanities and Social Sciences and 55% marks in disciplines like Natural Sciences including Mathematics and Professional Courses like Engineering
  - or
- C) Any post-graduate degree of the Madurai Kamaraj University or any other University considered as equivalent thereto.
  - or
- D) Officers of the defence services with a minimum of 10 years work experience; and be a graduate or should have successfully undergone :
  - I) NDA/MA/Air Force Academy/Indian Naval Academy
  - II) One of the following courses

National Defence College Course, Higher Command Courses, Long Defence Management Course, Senior Defence Management Course, Defence Service Staff College Course, Technical Staff Officers Course Army, Advanced Air Armament Staff Officers Course, IAF, Advanced course at the colleges of Air Warfare, Specialised Advanced.

An entrance test will be conducted in selected places in India FOR ALL candidates. THE VENUE AND DATE OF ENTRANCE TEST WILL BE ANNOUNCED LATER

DURATION : 3 years

Prospectus and application form can be had in person or by post from 1.7.1996 from

The Director, Directorate of Distance Education,  
Madurai Kamaraj University, Madurai-625 021,  
Tamil Nadu.

on requisition accompanied by the following .

- (I) A DEMAND DRAFT for Rs. 250/- (Rupees Two Hundred and Fifty) drawn in favour of the Director (MBA/CELL), D.D.E., MADURAI KAMARAJ UNIVERSITY, MADURAI-625 021. The Demand Draft may be obtained either on the State Bank of India or on any other Nationalised banks payable at Madurai. CHALLANS, CHEQUES, POSTAL-ORDERS, MONEY ORDERS, PAY ORDERS AND CASH WILL NOT BE ACCEPTED.
- (II) Two self addressed slips with Pin Code
- (III) A self addressed stamped envelope of 13 cms. x 28 cms. for Rs. 11/- to obtain by post.

The students are advised to write their name and complete address in block letters on the reverse side of the Demand Draft.

LAST DATE FOR ISSUE AND RECEIPT OF FILLED IN APPLICATION IS 31.7.1996.

The envelope containing the requisition with Demand Draft for Rs. 250/- for obtaining the Prospectus and Application must be superscribed as "REQUEST FOR M.B.A. (DISTANCE LEARNING PROGRAMME) APPLICATION".

The University is not responsible for any delay or loss in postal communication.

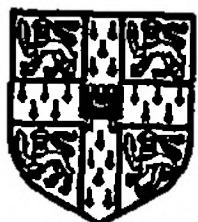
In other States and abroad the Directorate is offering M.B.A. (DLP) Course through the following centres :-

1. Mr S.R. Gupta, 6-64/1, Bhavani Nagar, Hyderabad - 500 060.
2. Ms. Sujatha Lakshmi, H.No. 2-5-736, Subedari, Warangal - 506 001.
3. Mr R.Babu H.No. 194, Prakasam Road, Tirupathi - 517 501
4. Mr. D. Rama Rao, Rama Public School, Vijayawada - 520 003.
5. Mr. K. Srinivasa Rao Patnayak, 46-15-3, Donaduparthi, Visakhapatnam - 16.
6. Mr. Khader Khan, 21/21, Manohar Pukur Road, Calcutta - 700 029.
7. Dr. D. Jayaraj, A-30, Vishal Enclave, Rajouri Garden, New Delhi - 110 027.
8. Dr. Gaspar B. Lewis, A-1089/1, Indira Nagar, Lucknow - 226 016.
9. Prof. C. Ravindran Nair, T.C. 27/1317, Convent Road, Trivandrum - 695 001.
10. Mr. Madukar Rao, 119, M.P. Nagar, Zone II, Bhopal - 462 011.
11. Mr. T.M. Balakrishnan, No. 3, West Brindavan, Pondicherry - 605 013.
12. Dr. Raji Reddy, Bhavan's College Campus Andheri (W), Mumbai - 400 058
13. Principal, Jyoti Nivas College, Hosur Road, Bangalore - 560 095.
14. Mr. M.K. Jawahar, Regional Co-ordinator, Abu Dhabi Educational Institute, P.O. Box - 71296, Abu Dhabi, U.A.E., Telephone : 349752, Fax : 349762.
15. Mr. Qais Al-Ateeqy, Chairman, G.I.C.P., P.O. Box - 64070, Shuwaikh - 70451, KUWAIT, Telephone : 2407110, Fax : 2407049, 2447910.

Candidates may contact the respective Co-ordinators/Programme Officers for admission.

Palkalnagar,  
Madurai - 625 021

Dr. T. John Saheyam Chelliah,  
DIRECTOR.



## CAMBRIDGE NEHRU SCHOLARSHIPS

October 1997

**The Nehru Trust for Cambridge University and the Jawaharlal Nehru Memorial Trust**, in collaboration with the **Cambridge Commonwealth Trust**, offer up to ten scholarships annually (eight Cambridge Nehru Scholarships and two Jawaharlal Nehru Memorial Fund Cambridge Scholarships\*) to Indian students under the age of 26 (on 1 October 1997) who have a First Class Honours Degree or its equivalent, and who intend to pursue a course of research at Cambridge leading to the degree of PhD. Candidates appearing for their first degree examination in 1997 are not eligible for the scholarships. Those who have in addition a First Class Master's Degree or its equivalent may be given preference. Applicants must be successful in winning an ORS award which pays the difference between the home and overseas rate of the University Composition Fee. ORS application forms will be sent to eligible candidates in due course.

The scholarships are tenable for a period not exceeding three years and will cover the University Composition Fee at the home rate, approved College Fees, a maintenance allowance sufficient for a single student and a contribution towards a return airfare by the cheapest available route.

Further details and Preliminary Application Forms can be obtained before 19 AUGUST 1996 from:

- The Joint Secretary  
Nehru Trust for Cambridge University  
Teen Murti House, Teen Murti Marg  
New Delhi 110011

Applicants should give full details of their academic qualifications and state that they wish to be considered for a Cambridge Nehru Scholarship. Preliminary Application Forms must be returned to the above address **NO LATER THAN 9 SEPTEMBER 1996**.

The selection of Cambridge Nehru Scholars and Jawaharlal Nehru Memorial Fund Cambridge Scholars will be made in June 1997.

\* *Preference for the Jawaharlal Nehru Memorial Fund Cambridge Scholarships may be given to candidates in the broad fields of Science Policy, Technology and Global Restructuring, Philosophy and History of Science, Comparative Studies in Religion and Culture, International Relations and Constitutional Studies, Indian History, Civilisation and Culture, Interface of Social Change and Economic Development, Environmental Ecology and Sustainable Development.*